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ABSTRACT

Based on desk reviews and/or field studies of 102 projects related to women, this report synthesizes the results of A.I.D. experience since 1973 in targeting women in development (WID) activities. The major finding is that mainstream projects that ensure women's participation in accordance with their roles within the project's baseline situation are more likely to achieve their aims than projects that do not. A review of the relationship of gender variables to the achievement of socioeconomic goals found that understanding gender factors in agricultural production is crucial to successful technology transfer. Also crucial at the level of socioeconomic impact is an understanding of the various sources of and control over income and of gender roles in consumption. Ten practical suggestions are made to improve gender analysis techniques, delivery of resources to women, and tracking of women's participation in project activities. A conclusion review of the various types of women's projects finds that: (1) mainstream project with "gender sensitive" designs are the most effective at meeting WID objectives; (2) women-only components in larger projects can be effective, although they may lead to tokenism if gender differences are ignored; and (3) women-only projects tend to be small in scope and costly in staff time, and are best suited foı the delivery of training. (JJ)

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A.I.D. Program Evaluation Report No. 18

Women in Development: A.I.D.'s Experience, 1973-1985
Vol. 1. Synthesis Paper

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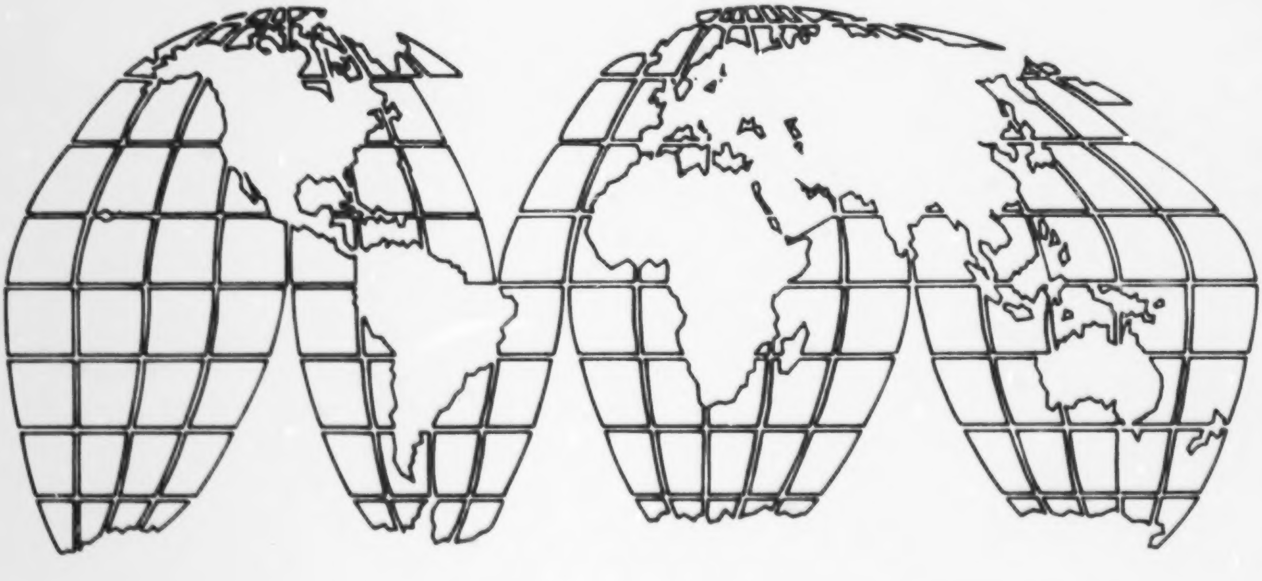

April 1987

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WOMEN IN DEVELOPMENT: A.I.D.'s EXPERIENCE, 1973-1985

VOL. I. SYNTHESIS PAPER

A.I.D. PROGRAM EVALUATION REPORT NO. 18

by

Alice Stewart Carloni

U.S. Agency for International Development

April 1987

The views and interpretations expressed in this report are those of the author and should not be attributed to the Agency for International Development.

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FOREWORD

A.I.D. was among the first donor agencies to recognize the central role of women in economic and social development. A.I.D.'s legislation and policy guidance on women in development have served as models to others. The Agency has supported a wealth of research and information sharing on this topic over the years, and has acquired a significant amount of project experience. It is this experience that is presented and analyzed here.

The findings and conclusions of the study will be of interest not only to scholars and practitioners in the field of women in development, but also to the wider development community. The study provides new insights on the question of project effectiveness and impact. It suggests that attention to gender is a necessary element in meeting project objectives and in achieving overall development goals. With the publication of this study, A.I.D.'s Center for Development Information and Evaluation is pleased to be able to carry on A.I.D.'s tradition of leadership in this important subject.

W. Haven North
Associate Assistant Administrator
Center for Development Information
and Evaluation
April 1987

PREFACE

This report synthesizes information from 102 Agency for International Development (A.I.D.) projects covering a 12-year time span. It is not an evaluation of A.I.D.'s women-in-development projects, nor is it a study of the Office of Women in Development or its program. The report documents how A.I.D. has interpreted its women in development mandate over the years and how A.I.D. policy in this area is being implemented. A.I.D.'s many years of leadership and experience with women in development provide a basis for a much better understanding of the role gender plays in the achievement of development goals.

The Center for Development Information and Evaluation (CDIE) began studying A.I.D.'s women in development experience during the summer of 1984 in anticipation of the 1985 Nairobi World Conference To Review and Appraise the Achievements of the U.N. Decade for Women. CDIE planned a year-long study that would include a desk review of project documents in five sectors and fieldwork in selected countries. CDIE formed a working group of expert consultants and A.I.D. staff who were known for their expertise in the women in development subject to advise on the design of the study and to produce the reports.

But halfway through the year it became apparent that the work could not be completed in the original time frame. Significant differences emerged among the members of the working group on the meaning of even common terms used in the existing literature on women in development. The definitional and conceptual problems were basic. What is "women in development," and to what does the term refer? Does it imply a program or a project for women only? A goal of the development process? Or a means to achieving development itself? Is the issue women or gender? The Percy Amendment to the Foreign Assistance Act directs A.I.D. to "integrate women into their national economies"; however, what does "integrate" mean in a project context? And once integration is achieved, does the term "women in development" still apply? A.I.D.'s 1982 Women in Development Policy Paper stresses the importance of women's contribution to the success of projects. But the policy also emphasizes equity--bringing the benefits of development to women--as an end in itself. Which should be the focus of the study?

These problems slowed the preparation of the final synthesis paper considerably. The 1-year schedule stretched to nearly 3-years as the working group went through a painstaking process of defining and redefining terms. The group met periodically to discuss the issues and to refine the evolving study approach through many drafts of the final synthesis paper. Defining and measuring women's participation in development projects, for example, was a particularly troublesome issue. What exactly is participation? How should participants be counted? Are all household members living in the area of the project counted equally as "participants"? Or are participants only those who provide labor in a project? If so, are unpaid laborers also considered "participants"? How then do we differentiate between a person contributing labor to a project and one receiving project resources, such as training? What is the difference between "participating" in a project and "benefiting" from a project, or are they one and the same? A.I.D. documents usually interchange the two.

In the end, a consensus emerged on the best way to present these key terms in the synthesis. The definitions are given in Section 1, Introduction. However, the evaluation process revealed a lesson with relevance beyond this study: ambiguity and confusion persist in A.I.D.'s use of terms in project design and evaluation, in particular concerning the "people side" of development. Design and evaluation documents need to be much clearer in defining what is meant by participation in development activities, in describing beneficiary groups, and in articulating the linkages between project participants, project activities, project outcomes and benefits, and development goals.

The study was also difficult conceptually. A.I.D.'s women-in-development experience could not be analyzed neatly, for example, in a particular sector. The Policy Paper establishes women in development as a cross-cutting issue. "The responsibility for implementing A.I.D.'s Women in Development Policy rests with all of A.I.D.'s offices and programs at all levels of decision making. Implementation of this policy must be understood to be an important qualitative aspect of A.I.D.'s overall program, one which is crucial to the achievement of the Agency's goals. It is not a concern which can adequately be addressed in any one sector alone or by any single office or officer." (A.I.D. 1982, 9).

To be consistent with this policy, we selected the A.I.D. activities for the study that were representative of projects in A.I.D.'s total portfolio. We did not limit the study to women-only activities nor to any one type of project. But the analytical approach required to evaluate this broad perspective on A.I.D.'s women-in-development experience was slow to develop, even in the hands of experts.

We knew from the beginning that asking the question "does the A.I.D. program benefit women?" was insufficient. We needed to probe further to examine the implications of benefits or lack of benefits to women for overall development goals. The Policy Paper states that the economic participation of women is essential to balanced economic growth--that if women benefit from A.I.D.'s assistance, the whole process of development is advanced. But how? And what is the cost to the development process if women are disadvantaged or ignored by development programs?

To answer these questions we developed the conceptual framework found in Section 1, which guided the study through the final synthesis stage. When evaluation reports concluded that women's participation in a project was low, the group pushed the analysis further and asked, in effect, so what? Did the absence or presence of women in a project make any difference in the project's outcome? What relationship, if any, could be seen between explicit attention to gender roles at the design or implementation stage and the successful achievement of project objectives? In other words, how does the gender of project participants and beneficiaries affect the project and its goal? This approach offered the best hope of linking our findings to the thrust of A.I.D.'s two-pronged policy, focusing on both equity and efficiency.

The study results are organized in the synthesis paper to correspond to A.I.D.'s logical framework analysis method for project design, with stated goals at two levels: immediate project purposes and longer term development goals. Section 2 describes the role gender plays in the achievement of projects' immediate objectives, while Section 3 discusses the impact of gender on longer term development outcomes. The findings from projects with an institutional development focus were separated from those that provided direct service delivery because these kinds of projects were so different analytically. The results of our analysis revealed that, in fact, gender variables do affect projects with an institution-building goal differently than projects that involve direct contact with farmers or grassroots organizations.

The analysis is also divided among the five sectors highlighted in A.I.D.'s Women in Development Policy Paper (agriculture, education, water and sanitation, employment and income generation, and energy/natural resources). Women-only projects, women-only components of larger projects, and mainstream (i.e., integrated) projects are compared in Section 4, and regional differences are briefly described.

The results of the study corroborate the assertions in the Policy Paper that gender variables influence the success of development projects and the quality of the entire development effort. These findings suggest that a better understanding of gender roles in developing country societies is a key to understanding the development process itself.

A.I.D. has long known that when projects are appropriately planned and adapted to reflect local conditions, the projects are more likely to achieve their objectives. A.I.D. procedures for project design and implementation have been refined over the years to promote this better understanding, through the introduction of social soundness analysis, social and institutional profiles, and other analytic techniques to the project development process. Yet this study and other recent studies (Robert Cassen and Associates 1986, Devres 1987) concluded that development activities continue to reflect poor understanding of the local conditions in which project activities must operate.

This study suggests that understanding gender variables in the context of a project is key to understanding human variables in development. Understanding the ways in which poor women and men interact, divide responsibilities, allocate risk and resources, share burdens, organize their labor, and plan for the future is essential to planning effective development programs. With the publication of this two-volume report,[1] CDIE hopes to enhance this understanding among A.I.D. staff and other development practioners. It is our hope that future development activities will then more accurately reflect the role that gender plays in the populations that A.I.D. assistance is designed to serve and that the benefits of development will more likely be assured for all.

Paula Goddard
Deputy Associate Assistant Administrator
Center for Development Information
and Evaluation
April 1987

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[1] A companion volume to this report will be published by CDIE as "Women in Development: A.I.D.'s Experience, 1973-1985," Vol II, "Ten Field Studies."

ACKNOWLEDGMENTS

This study was a group enterprise. Rae Blumberg provided the original conceptual framework and the desk review questionnaire. The synthesis paper was written by Alice Stewart Carloni with editorial assistance from Chris Krueger and Jane Knowles. The paper is drawn from 6 desk reviews and 10 field studies whose authors are listed in Appendix D. A working group comprising many of these people met periodically to advise and guide the study.

CDIE coordination of the study was provided by Ana Maria Long and myself. Several other A.I.D. staff contributed their comments and participated in the workshops including Kay Davies, Margaret Sarles, Bill Miner, and Jack Francis.

Meta de Coquereaumont and Pamela McDade of Professional Management Associates prepared the paper for publication, including word processing, editing, proof-reading, and layout.

CDIE gratefully acknowledges these important contributions and the good spirit in which all who contributed gave of their time and effort.

Paula Goddard

SUMMARY

Introduction

The paper synthesizes an evaluation of more than a decade of Agency for International Development (A.I.D.) experience with women in development. Evaluation objectives were to

- Examine the relationship between gender variables and the achievement of project purposes and goals in the five sectors highlighted in the 1982 A.I.D. Policy Paper Women in Development

- Draw lessons for improved policy implementation at the project level

In 1984, A.I.D.'s Center for Development Information and Evaluation (CDIE) drew up a list of 416 projects from A.I.D.'s data bank, using such key words as "women," "female," and "gender," and randomly selected 98 projects for analysis by sector in a set of desk reviews. Of the 98 projects analyzed, 82 percent are mainstream and 18 percent are women's projects or have a special women's component. In 1985, CDIE chose 10 projects for detailed field studies--6 from the cases in the desk reviews and 4 others at the suggestion of A.I.D. staff. The synthesis paper sums up the findings of these analyses and the conclusions of two seminars with the study consultants and A.I.D. staff.

The basic hypothesis underlying the evaluation is that attention to the differences between the roles, responsibilities, and opportunities of women and men increases the probability that projects will involve and benefit women, achieve project purposes, and contribute to the achievement of long-range socioeconomic goals. In the light of this hypothesis, a seven-component conceptual framework was developed, which linked the following elements:

- The baseline situation within which every project operates

- Analysis of the differing responsibilities and opportunities of women and men

- Adaptation of projects to deal with these differences

- Gender of project participants

-- Relationship of these four factors to

- achievement of project purposes
- impact on women
- achievement of socioeconomic goals

Findings

The major finding of the evaluation is that

> mainstream projects that ensure women's participation in proportion to their roles and responsibilities within the project's baseline situation are more likely to achieve their immediate purposes and their broader socioeconomic goals than are projects that do not.

This finding is examined in detail at both the project-purpose and the project-goal levels.

Achievement of Project Purposes

In the agriculture sector, projects that delivered resources directly to women in accordance with their role in the local farming system were much more likely to succeed in achieving their purposes than were projects in which women did not receive resources. The degree of match between the gender division of labor in the baseline situation and the gender of project participants is a key factor for successful efforts to raise productivity and to diversify small farm production.

> In a project in which gender roles in agriculture were ignored, crops were planted incorrectly and did not grow, machinery provided by the project was not used, and crops were inadequately fertilized. In a project in which design was adapted to fit gender roles, significant amounts of labor were mobilized for timely soil and water conservation efforts.

But the process of adapting projects to the gender division of labor in the baseline situation is by no means automatic. In case after case, the evaluation showed that project planners should never assume that female farmers will be automatically included in training or extension activities simply because there are no formal barriers to their participation.

Even where a mainstream project focused on crops or activities that were primarily women's responsibility, women's participation in these projects was low unless delivery systems explicitly earmarked resources or services to women.

In the employment sector, projects that adapted mainstream training and credit programs to enable them to reach women were more effective in expanding women's employment than women's projects that worked outside mainstream institutions.

-- Income-generating projects for women very rarely achieved their objectives and hence were of little economic benefit to the participants. There proved to be a wide gap between identifying women's needs and designing viable projects.

-- Job training projects stopped short of creating employment because trainees lacked capital to set themselves up in business. The exception was a project that adapted recruitment procedures of a mainstream industrial job training program to enable women to acquire nontraditional skills and then helped place them in jobs in the industrial sector.

-- Credit projects that adapted eligibility criteria to enable informal sector entrepreneurs with few assets to receive loans had high levels of female participation and were also the most successful in increasing employment and raising beneficiary incomes. Female entrepreneurs were better at loan repayment and creating jobs than were men.

In the energy and water/sanitation sectors, the degree of match between the gender of project participants and the division of labor in the baseline situation is highly correlated with achievement of project purposes and goals. Most projects focused too narrowly on women's domestic roles, viewing women mainly as passive beneficiaries of improvements in water and fuel supply and overlooking their potential contributions to complementary activities such as the construction and maintenance of water systems, afforestation, and watershed protection. Designs based on baseline studies of women's actual patterns of water/fuel use and their preferences and constraints were more successful than designs based strictly on technical criteria.

- -- Cookstoves saved less fuel than anticipated, partly because of faulty design and partly because of their lack of versatility. Instead of abandoning their traditional hearths, people continued to use them for some part of their cooking because of their greater versatility.

- -- Biogas plant milling fees were too costly, and women needed the manure for other purposes; as a result, the plant was little used.

- -- An afforestation component was unable to meet its target because the timing of the tree planting campaign interferred with women's responsibilities for planting crops on their own farms.

As in the agriculture sector, energy and water/sanitation projects that analyzed and adapted to the reality of women's roles in the baseline situation were more successful in achieving their purposes than were those that did neither.

In the education sector, the correlation between the level of women's education and the goal of achieving improvements in health, hygiene, nutrition, and family planning is clear. Education is also correlated with higher productivity and employment. However, the correlation between the level of female participation and achievement of immediate project purposes is difficult to document. Most of the evaluation reports used for the study overlooked gender disparities in enrollment when assessing educational institution-building projects.

Achievement of Project Goals

The lack of a clear causal relationship between the achievement of project purposes and long-term socioeconomic goals continues to be a sensitive point for development assistance. The relationship between them is neither linear nor automatic. The findings from this evaluation show that gender variables intervene at every step in the chain in critical ways. The paper reviews the relationship of gender variables to a set of socioeconomic goals and concludes that

> Understanding gender factors in agricultural production is crucial to the successful transfer of technology into agricultural systems. These factors include differential access to and control over

resources, gender-linked labor constraints, control of income from sale of crops, and differing stakes in and incentives for increasing output.

Understanding the various sources of income and the control over the uses of income is crucial to raising the levels of living of the poor. Understanding gender roles in consumption is crucial to the achievement of improved nutrition and family well-being.

Conclusion

The paper provides 10 practical suggestions for project design, implementation, and evaluation. They include adequate analysis of gender differences in the baseline situation, appropriate adaptation of project delivery systems in the light of those differences, and tracking the results of such adaptations. Finally, the paper reviews the relative success of women-only projects, projects with women's components, and mainstream projects that attempt to "integrate" women into their activities. It concludes that

-- Integrated projects require gender-sensitive designs in order to be successful in achieving project purposes and in benefiting women. Of the three project types, gender-sensitive, "integrated" (or mainstream) projects are the most effective in promoting and utilizing women's contributions to socioeconomic development. Mainstream projects can often be made gender sensitive by adjustments in the focus of project activities, in their location and timing, and in support services. The synthesis paper identifies a number of such adaptations.

-- Women-only projects tend to be very small in scope and disproportionately costly in staff time. The chances of success can be enhanced by locating them in major (i.e., mainstream) institutions rather than in women's bureaus or local voluntary organizations. Women-only projects are best suited to delivering training rather than to increasing production or generating income.

-- Women's components in larger projects can be an effective way of benefiting women if the components are well integrated into the whole range of project activities. Alternatively, if they focus only on women's domestic roles, they can lead to tokenism and distract attention from significant gender issues in the overall project.

Evaluation findings show that project investments based on gender analysis can have higher returns and provide benefits to women. The returns could be much greater if institutional barriers to women's participation and benefits were better understood and projects were adapted to overcome the barriers. Women-only projects and women's components of projects can be useful in specific contexts. Gender-sensitive adaptation of mainstream projects will most effectively include women in the development process and also provide a higher return to project investments.

1. INTRODUCTION

1.1 Background

Women in development has been a subject of particular attention for the Agency for International Development (A.I.D.) since 1973, when the Percy Amendment to the Foreign Assistance Act required that U.S. bilateral assistance programs

> be administered so as to give particular attention to those programs, projects and activities which tend to integrate women into the national economies of foreign countries, thus improving their status and assisting the total development effort.

Publication of the Women in Development Policy Paper in 1982 further refined the Agency's approach. The Policy Paper emphasized that

> For A.I.D. to undertake an effective strategy that promotes balanced economic development, a focus on the economic participation of women in development is essential.... Research from the last decade portrays a fairly consistent pattern of findings that in most developing countries, females differ from men in their:
>
> -- Access to and control over productive resources
>
> -- Stakes in development outcomes
>
> -- Responses to incentives introduced to encourage development

The Women in Development Policy Paper illustrates the importance of women's economic roles in five sectors: agriculture, employment and income generation, human resource and institutional development, energy and natural resource conservation, and water and health. It concluded that

> The key issue underlying the women in development concept is ultimately an economic one: misunderstanding of gender differences, leading to inadequate planning and designing of projects, results in diminished returns on investment. Gender, therefore, is a critical category of analysis in A.I.D.'s work, one which has not received sufficient attention to date.

Beginning in 1984, in preparation for the Nairobi World Conference to Review and Appraise the Achievements of the U.N. Decade for Women, the Center for Development Information and Evaluation (CDIE) in A.I.D.'s Bureau for Program and Policy Coordination undertook a systematic evaluation of more than a decade of A.I.D. experience with women in development. The objectives of the evaluation study were to

-- Assess A.I.D. experience with women and socioeconomic development in the five sectors highlighted by the Policy Paper

-- Examine the relationship between gender variables and the achievement of project purposes and goals

-- Draw lessons for improved policy implementation at the project level

The study generated a wide range of materials, including 6 desk reviews and 10 field-based case study reports. The desk reviews are among CDIE's Working Papers; the case studies are to be published together as Volume II of this report. The entire set of documents is listed in Appendix D. The purpose of this synthesis paper is to present the conceptual and practical findings of the entire effort.

The paper is organized in four major sections and three substantive appendixes. The introduction presents a basic discussion of the methodology, terminology, and conceptual framework. Sections 2 and 3 examine the key relationships with which the study was concerned: the importance of gender issues for the achievement of project purposes and of long-term socioeconomic goals. Section 4 returns to the conceptual framework and spells out more clearly the intervening linkages--especially project adaptation--that must occur if A.I.D. projects are to effectively promote and utilize women's contributions to socioeconomic development. Appendix A presents findings from the computer-based analysis of data from 98 projects. Appendix B is a detailed presentation of the methodology employed in the sample selection and the analysis. Appendix C is a list of the projects examined in this study.

1.2 Methodology

Using the Women in Development Policy Paper as a guide, five sectors were chosen for analysis: agriculture, employment/income generation, education, energy/natural resource conservation, and water supply/sanitation. A list of 416 projects was drawn from A.I.D.'s document data bank, using such key words as "women," "females," and "gender." It was necessary to use these terms as identifiers to ensure that the project documentation for the sample would provide information relevant to the purpose of the study, that is, understanding the relationship between gender variables and project outcomes. Next, 98 projects were randomly selected from the list of 416. It is important to highlight that 82 percent of the projects in the sample were mainstream projects and only 18 percent were women's projects or had a special women's component. Thus, findings based on the analyses of the project sample can be regarded as relevant for most A.I.D. projects. (See Appendix B for a more detailed discussion of the sample and methodology.)

During the first phase of the study, six desk reviews--two for agriculture and one for each of the other sectors chosen--were made by experts familiar with women-in-development issues in each sector. A questionnaire was used to elicit and codify information contained in project documents for analysis across sectors. Compilation of the the results of the questionnaire revealed gaps in the documentation. In some cases, the reviewer's first-hand knowledge of the project allowed her to fill those gaps; in others, documentation gaps were filled by consulting A.I.D. project officers. Nonetheless, for some projects, incomplete documentation prevented full analysis. For this reason, the findings from the computerized analysis reported in Appendix A refer only to those projects on which there was sufficient documentation to permit analysis.

As the desk review phase drew to a close, a second phase was designed to carry out field studies of 10 projects: 6 of these projects had been included in the desk review; 4 other projects recommended by A.I.D. officers as likely to provide insights relevant to the study were added. The full list of projects covered in both phases is in Appendix C. Each time a project is referred to in the text, an identification number appears in parentheses; by referring to the list in Appendix C, the reader can identify the country and the project title.

This synthesis paper pulls together findings from both phases of the study and from discussions by study participants and A.I.D. staff who joined in two seminars as this synthesis was being developed. While a certain degree of conceptual clarification and confidence has been reached to date, it is our hope that readers will examine the findings against their own knowledge and experience and contribute to ongoing efforts to understand what constitutes effective project implementation and socioeconomic development, and the role gender analysis and project adaptation play in achieving them.

1.3 Terminology

Before discussing the conceptual framework, it is necessary to comment on some key terms.

1.3.1 Women Versus Gender

The initial impetus for a focus on the roles and functions of women in developing countries was a concern with equity--an attempt to ensure that development projects and processes provided benefits to women as well as to men. Over time, however, it became clear that differences between the roles, responsibilities, and opportunities of men and women have implications that go beyond equity; they also affect projects' ability to achieve their immediate purposes and long-range development goals. The introduction of the more relational term "gender" to complement emphasis on "women" is one important indication of a growing concern with the broader implications of differences between men's and women's economic roles.

A focus on "women" in isolation can obscure differences among women stemming from age, socioeconomic status, and stage in the household cycle. "Gender" is a broader analytic concept, which not only encompasses concern with women but also highlights women's roles and responsibilities in relation to those of men. Gender, like age and socioeconomic status, is an aspect of social organization that both reflects and is circumscribed by the surrounding culture. A fuller treatment of the concept of gender and its application to the process of project design and implementation is one of the themes of this paper.

1.3.2 Participants Versus Beneficiaries

In recent years, development theorists have come to differentiate between direct versus indirect and intended versus unintended beneficiaries of projects, but there has been no comparable rigor in the distinction between project participants and beneficiaries. Regardless of whether they play any active role in a project, residents in affected areas are commonly referred to as "participants"; regardless of whether or not they actually benefit, participants in project activities are commonly referred to as "beneficiaries."

This study and others have indicated the clear need for more precise terminology. The simple equation of presence in the project area with "participation" and the equation of participation with "benefit from" a project is particularly troublesome in the case of women. For example, it can never be assumed that if one family member participates in a project, the whole family participates. Nor can it be assumed that if one family member benefits, there is an automatic "trickle over" benefit to other family members. Precision about the gender, age, and socioeconomic status of project participants and actual beneficiaries is important. Clarification of terminology is a prerequisite for shedding light on how the distribution of benefits within households affect women's and men's differential incentives to undertake project activities and how these affect project outcomes.

1.3.3 Achievement of Project Purposes Versus Achievement of Goals

A.I.D. terminology distinguishes between a project's immediate "purposes" and the long-range development "goals" the project was intended to further. Even though, strictly speaking, project designers and implementers can only aim at achieving a project's immediate purposes, the nature of these purposes and the strategies for achieving them must be judged by their effectiveness in contributing to overall development goals.

Increasingly it is recognized that development assistance encounters serious difficulty precisely in this regard: many projects that achieve their immediate purposes fail to have a sustainable impact on the lives of the people they were intended to help. This is usually explained by exogenous factors (events beyond the project's control, such as bad weather, shifts in government policy, or changes in the world market). It is less often recognized that such factors as mistaken assumptions about how a project's immediate objectives actually contribute to well-being can also be responsible.

Mistaken assumptions about the roles and responsibilities of men and women are a factor that deserves much more attention. The literature on women in development shows that even in cases where immediate purposes are achieved, projects' contribution to overall development can be minimized by failure to take gender roles into account. In the worst case, achieving project objectives while overlooking intrahousehold dynamics can be counterproductive. There are cultural contexts in which project designers can systematically harm family welfare if they do not know how responsibilities are divided among family members. For example, a project may achieve its objective of income generation but fail to achieve its goal of alleviating hunger if, because of family expenditure patterns, the income generated by the project is not used for the purchase of food. In later sections, this paper further examines the role gender plays in explaining how projects can increase production and raise income without actually improving well-being.

1.4 Conceptual Framework

From the beginning, the basic hypothesis underlying the evaluation was that

- Attention to gender differences increases the probability that projects will reach women, benefit them, achieve project purposes, and contribute to the achievement of long-range socioeconomic goals

- Overlooking gender differences decreases the probability that projects will reach women and benefit them; this in turn reduces the probability of achieving immediate project purposes as well as broader socioeconomic goals

In the light of this hypothesis, a seven-component conceptual framework was developed, which linked the following elements:

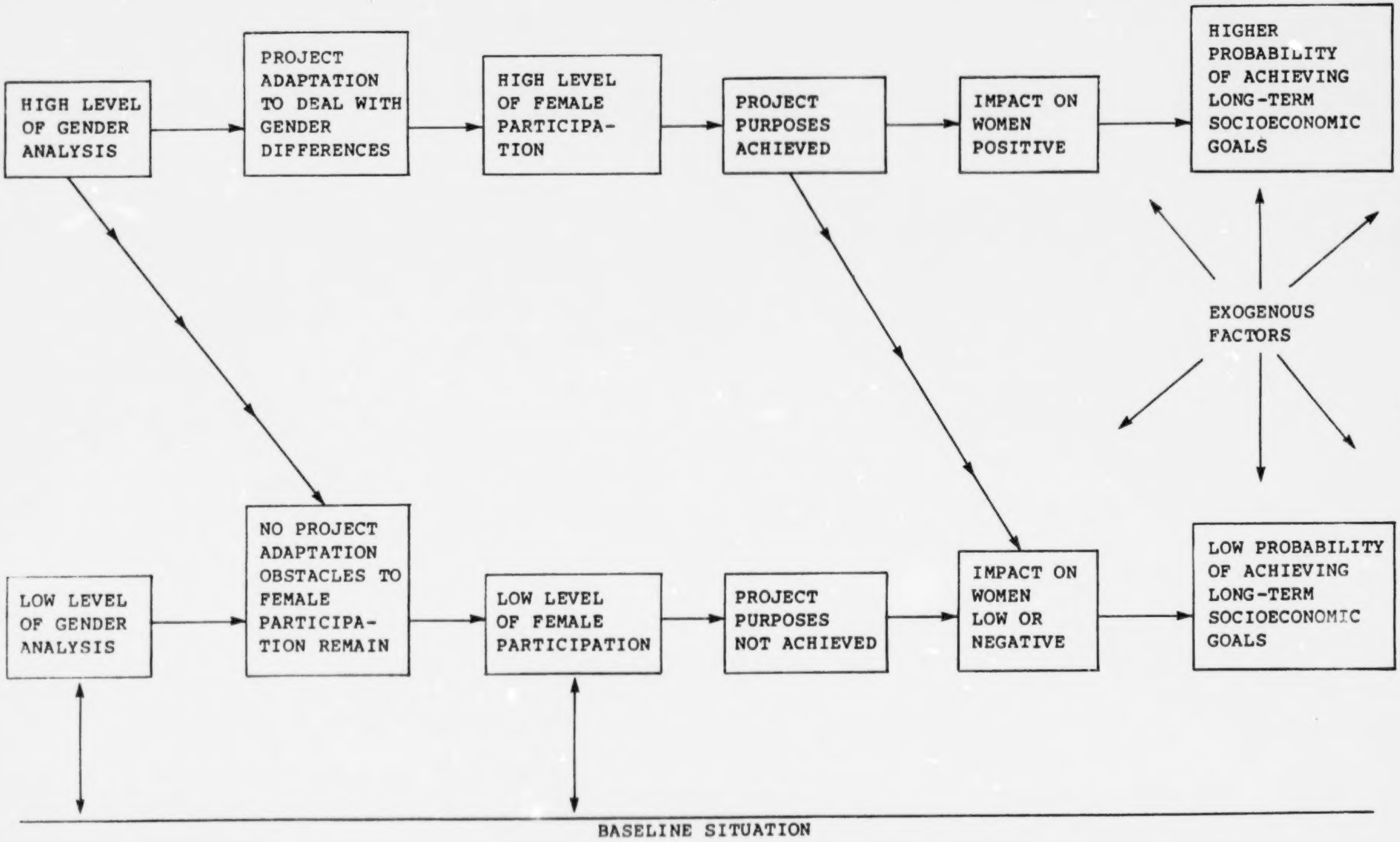
- The baseline situation
- Gender analysis
- Adaptation of projects to deal with gender differences
- Gender of project participants
- Achievement of project purposes
- Impact on women
- Achievement of socioeconomic goals

The relationship among these factors is illustrated schematically in Figure 1.

1.4.1 The Baseline Situation

Every project operates within a specific geographic, economic, social, and cultural situation as well as a broader policy environment. The gender-linked division of labor and of other roles and responsibilities varies widely between countries and among different social, economic, and cultural groups within countries. It was hypothesized that recognition of such gender differences would have a larger impact on projects concerned with activities in which women's role is major than on those in which their role is minimal.

Figure 1. Conceptual Framework


HIGH LEVEL OF GENDER ANALYSIS
PROJECT ADAPTATION TO DEAL WITH GENDER DIFFERENCES
HIGH LEVEL OF FEMALE PARTICIPATION
PROJECT PURPOSES ACHIEVED
IMPACT ON WOMEN POSITIVE
HIGHER PROBABILITY OF ACHIEVING LONG-TERM SOCIOECONOMIC GOALS
EXOGENOUS FACTORS
LOW LEVEL OF GENDER ANALYSIS
NO PROJECT ADAPTATION OBSTACLES TO FEMALE PARTICIPATION REMAIN
LOW LEVEL OF FEMALE PARTICIPATION
PROJECT PURPOSES NOT ACHIEVED
IMPACT ON WOMEN LOW OR NEGATIVE
LOW PROBABILITY OF ACHIEVING LONG-TERM SOCIOECONOMIC GOALS
BASELINE SITUATION

1.4.2 Gender Analysis

For the purpose of this study, gender analysis is defined as the analysis of the intersection between male and female roles/responsibilities and project goals, strategies, and outcomes at any stage of the project cycle. During the desk review phase of this study, project documents were examined for the quality of gender analysis.

The following items were identified as essential for an understanding of gender factors:

- The division of labor
- Access to and control over productive resources
- Stakes and incentives in project activities
- Contribution to household income
- Degree of income pooling within the household
- Responsibilities for different types of expenditure

Each project was coded first to assess how much was said about women in project design, implementation, and evaluation documents; second, to determine whether or not women's productive as well as their reproductive roles were analyzed; and third, to evaluate the linkage of this analysis to project activities. For example, agriculture projects that analyzed the gender division of labor and pointed out how integration of women could enhance the project were rated "high" on gender analysis; projects that mentioned women as potential beneficiaries but failed to link their role to project outcomes were coded as "low" on gender analysis.

The basic hypothesis was that a detailed gender analysis would increase the probability that women would participate in and benefit from the project, whereas superficial gender analysis ("boilerplate") would not affect women's participation or benefit very much. It was further assumed that even the best gender analysis would not automatically increase women's participation or benefit if constraints affecting outreach to men and women of different ages and socioeconomic status were not recognized and explicitly addressed.

1.4.3 Project Adaptation

This component of the conceptual framework is linked closely with gender analysis. In fact, findings from this study suggest that it can be so closely linked as to be overlooked. When working hypotheses were formulated for the desk study, it was assumed that if gender roles in the baseline situation had been recognized and analyzed, project documentation would show corresponding adaptations in project design and implementation. Initially, only three possible adaptations were considered: a "women's project," a "women's component" in a larger project, or "earmarking" resources such as credit, equipment, personnel slots, or training for women[1] in a mainstream project. Later, the concept of project adaptation was expanded to cover a broad spectrum of possible interventions, including gender-responsive changes in project components, institutions, delivery systems, technical packages, and feedback mechanisms. It was hypothesized that without some type of adaptation, mere analysis of gender differences would have little effect on participation or the distribution of benefits.

1.4.4 The Gender of Project Participants

One of the study's main objectives was to examine the relationship between the gender of project participants at the grassroots (or "beneficiary") level and project outcomes. The interest grew out of insight into the gender-linked division of labor in smallholder agriculture, informal sector employment, domestic water, and fuel-related activities.

Women's level of participation was defined in terms of the following:

-- The share of project inputs going to women (in relation to men)

-- The proportion of women among persons taking part in project-organized activities (such as education, training, and demonstration)

-- The proportion of women among persons employed by the project

-- Women's representation in organizations (such as water-user groups, cooperatives, or farmers associations) and their voice in project decision-making

-- Women's labor in major project activities (such as crop production, soil conservation, or afforestation)

As the study progressed, it became increasingly clear that women's absolute level of participation in project activities was less relevant for project outcomes than the degree of match between the gender of project participants, the baseline division of labor and responsibilities, and the activities targeted by the project.

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[1] Full definitions are in Section 4.4.

Participation was judged to be "high" when the relative proportion of women participating in project activities reflected the gender division of labor/responsibilities in the major activities targeted by the project. A project was judged to have low levels of women participation when the proportion of women did not reflect the division of labor in the baseline situation (e.g., farm inputs are delivered only to male farmers for activities that are women's responsibility in the baseline situation). Women's participation in activities peripheral to the project's main thrust (such as cookstoves in a watershed management project) was expected to influence overall project outcomes only slightly. Participation of female professionals was expected to affect project success only when it improved contact with village women.

1.4.5 Achievement of Project Purposes

A major concern of the study was to examine the importance of gender variables for the achievement of immediate project objectives in the five sectors covered by the Women in Development Policy Paper. The hypothesis was that where women's roles are extensive in activities targeted by a project (e.g., farming, nonfarm production, domestic fuel and water supply, family health and nutrition), high levels of female participation increase the probability of achieving project purposes; where women's roles in targeted activities are extensive but women's level of project participation is low, there is a lower probability of achieving the same purposes. The key variable is the degree of match between the characteristics of project participants and the division of labor/responsibilities in activities affected by the project.

1.4.6 Impact on Women and Achievement of Socioeconomic Goals

One of the novel and intriguing aspects of the conceptual framework is the role played by gender variables in the linkage between achievement of project purposes and broader socioeconomic goals. All project purposes, if achieved, are meant to have a positive impact on larger societal aims. These larger goals--increased income, improved health, better nutrition, better standards of living, or reduction of poverty--are supposed to flow from the achievement of individual projects' purposes (although exogenous factors in the environment surrounding projects also affect this linkage). The conceptual framework suggests that the final impact of projects flows through gender variables, which in turn influence whether intended goals are reached.

An aim of the evaluation is to identify precisely where and when gender variables matter for the achievement of these broader development goals. It was hypothesized that projects that achieve their immediate purposes and at the same time have a positive impact on women are more likely to achieve their goals than projects that achieve their purposes but have a negative impact on women. Projects that fail to achieve their purposes and have a negative impact on women are even less likely to achieve their goals than those that have a positive impact on women in spite of failure to achieve other purposes.

2. THE IMPORTANCE OF GENDER FOR ACHIEVEMENT OF PROJECT PURPOSES

A.I.D. terminology distinguishes between a project's immediate purpose and the long-term goals a project is meant to further. This section of the paper examines the relationship between gender variables and achievement of short-term project objectives (or purposes) in each of the five sectors covered in the Women in Development Policy Paper. It draws on the findings of the 10 case studies of field projects in addition to the projects covered by the desk review.

2.1 Agriculture

The greatest share of A.I.D. resources is devoted to agricultural development. As a result, 40 of the projects analyzed in the desk review were in agriculture; 7 of the 10 case studies of field projects were also concerned, wholly or partly, with agriculture. Four of these case studies were included in the desk review; the other three were suggested by A.I.D. Missions as projects likely to provide insights relevant to the scope of the study. In all of the projects examined, women were responsible for some of the crops or activities selected for project intervention.

2.1.1 Farm-Level Projects

According to the Women in Development Policy Paper, the importance of gender variables for the success of projects aimed at raising the productivity of small farmers derives from the following factors:

-- Differences between men and women in their access to and control over productive resources (such as land, labor, capital, and expertise)

-- Differences in labor allocation (between different crops, as well as between crop and livestock production, off-farm work and domestic tasks)

-- Differences in stakes and incentives (depending on the control of crops and which family member benefits from a given activity)

It was expected that where women played a major role in activities targeted by the project, it would be possible to show a clear correlation between women's direct participation in project activities and the achievement of project objectives. Computerized analysis of the desk review sample strongly supports the assertions of the Policy Paper. Table 1 shows that when women's participation was high (i.e., substantial numbers of women received training, credit, and extension), projects were much more likely to achieve their objectives than when participation was low.

Table 1. Relationship Between Level of Female Participation and Achievement of Project Objectives: Mainstream Direct-Service[a] Projects in Agriculture (n = 20 projects with information)

Level of Participation	Achievement of Objectives		
	Low (n=6)	Medium (n=6)	High (n=8)
Low (n=11)	5	4	2
Medium (n=5)	1	2	2
High (n=4)	0	0	4

[a] A distinction was made between mainstream projects having direct contact with people at the grassroots level (referred to as "direct service" projects) and those having no grassroots contact (referred to as "institutional development" projects).

Another important finding is that token participation of a few women is not correlated with achievement of objectives. What matters is not whether the project was "equitable" in the sense of participation by a few women, but whether it reached the right people from the standpoint of gender roles in the farming system. The degree of match between the gender division of labor and the gender of project participants is the key factor for efforts to raise productivity and to diversify small farm production.

Gender analysis by itself, however, failed to show the expected relationship to achievement of project objectives (see Table 2). Low levels of analysis were often associated with failure to achieve objectives, but better analysis of gender differences was no guarantee that objectives would be achieved.

Table 2. Relationship Between Gender Analysis and Achievement of Project Objectives: Mainstream Direct-Service Projects in Agriculture
(n = 21 projects with information)

Level of Gender Analysis	Achievement of Objectives		
	Low (n=10)	Medium (n=6)	High (n=5)
Low (n=11)	6	4	1
Medium (n=5)	2	1	2
High (n=5)	2	1	2

To understand why good gender analysis was not correlated with achievement of objectives, we looked at the relationship between gender analysis and women's participation. Low levels of gender analysis showed some correlation with low participation, but high levels of gender analysis were not correlated with higher participation. This led us to look for an intervening variable that could explain why some projects with the best gender analysis had low levels of female participation.

Table 3 shows the correlation between gender analysis and project adaptation. Initially, we expected that adaptation would flow automatically from analysis of gender differences. Table 3 shows that this assumption was overly optimistic: although the expected relationship was found between failure to analyze gender roles and lack of adaptation, the projects that did the best job of gender analysis nevertheless rarely made appropriate adaptations to overcome barriers to women's participation or to increase the benefit to women.

Table 3. Relationship Between Gender Analysis and Project Adaptation: Mainstream Direct-Service Projects in Agriculture (n = 22 projects with information)

Level of Gender Analysis	Project Adaptation		
	Low (n=16)	Medium (n=5)	High (n=1)
Low (n=11)	10	1	0
Medium (n=5)	3	1	1
High (n=6)	3	3	0

Further analysis revealed a high correlation between project adaptation and levels of female participation (see Table 4). Not only was women's participation predictably lower when projects failed to adapt training and extension methods and messages, but--more important--female farmers' participation was substantially higher when conscious efforts (i.e., adaptations) were made to remove barriers to their participation.

Table 4. Relationship Between Project Adaptation and Women's Participation: Mainstream Direct-Service Projects in Agriculture (n = 18 projects with information)

Level of Adaptation	Level of Women's Participation		
	Low (n=11)	Medium (n=6)	High (n=1)
Low (n=12)	9	3	0
Medium (n=5)	2	3	0
High (n=1)	0	0	1

Given the fact that projects with higher levels of direct involvement of female farmers are more likely to achieve their objectives (Table 1), project adaptation should be a high priority for future action.

These findings are corroborated by Cloud in her desk review of agriculture projects. She found that projects were much more likely to achieve their objectives when the flow of resources to women matched the division of labor. When women's role in project-related activities was major but resources did not reach them, objectives were not achieved. Likewise, women were much more likely to receive resources in projects that explicitly targeted them than in projects that did not.

In case after case, the evidence showed that project planners should never assume that female farmers will be automatically included in training or extension activities simply because there are no formal barriers to their participation. Even in cases where the project focused on a women's crop or activity, project resources bypassed them when they were not explicitly earmarked for women.

For example, in Burkina Faso (previously Upper Volta), where women are responsible for most of the small-scale sheep, goat, and poultry production, a village livestock project (84) initially directed resources for small animal production to men. As a result, the people responsible for production--women--got no assistance. Toward the end of the project, a consultant who was brought in to find out why the project was not working recommended that future activities be directed to women. From then on, efforts were made to adapt the project to women, but little could be accomplished before the project terminated. The only thing village women actually received from the project were six roosters intended for cross-breeding, which died after project assistance was phased out.

In Cameroon (78), the connection between gender and the failure of a seed multiplication project to achieve its objectives is less clear. It is known that the project failed to achieve its objectives because the quality of groundnut seed produced by small-scale contract growers was poor. It is also known that the project delivered resources to men, who had little or no previous experience growing groundnuts since this had been women's work. Although it is impossible to draw a direct connection from the data available, a strong associative relationship exists.

Of the 20 cases, only one appears to contradict the hypothesis. This was a small farmer credit project in Egypt (76) that was highly successful in achieving its objectives despite a lack of match between the gender of loan beneficiaries and the division of labor in the baseline situation. What is intriguing about the case is that project planners originally anticipated that the majority of loans would go for field crops (men's domain) rather than livestock (women's domain). What actually happened is that the demand for livestock loans greatly exceeded the demand for crop loans. In part, the lack of interest in field crops reflected low prices, but widespread male migration may also have been a disincentive for investment in field crops. In the absence of conscious efforts to ensure that the persons responsible for livestock--women--could qualify for loans, only 8 percent of the loans were given in a woman's name. In the other cases, it is possible that men took out loans on behalf of their wife. Apparently, then, women received credit for their livestock activities despite their lack of formal access to loans. In this case we do not know, however, whether the women controlled the earnings from the sale of the livestock products.

In Fortmann's desk review, there were no cases with enough information to conclude that a project had failed to achieve its objectives because of lack of gender adaptation. At most, failure could be attributed to a lack of understanding of the target group and the local farming system in general, and the tendency to overlook the role of women could be seen as symptomatic of this larger problem (02, 03, 07).

The costs of overlooking gender are illustrated in the case study of the Northeast Rainfed Agricultural Development project in Thailand (94, see Blanc-Szanton, Viveros-Long, and Suphanchainat). Project management assumed that men were the principal farmers and trained them to carry out crop trials. In reality, many men had outside income sources and were frequently away from the farm. Because wives of "specialist" farmers received no training, crops were planted incorrectly and did not grow, the power tillers provided by the project could not be used, and a nitrogen-fixing crop intended to fertilize rice did not get planted. Even when the husband was present, advice on crop production was incorrectly transmitted from husband to wife.

Women were never consulted about their interest in the project. In some instances, when the wives found out how much additional work the trials would entail, they pressured their husband to drop out. Some trials fell a year behind schedule. The loss of time could affect the project's ability to transfer technologies to farmers during the life of the project.

In contrast, the benefits of adaptation to gender were illustrated by the case study of the Arid and Semi-Arid Lands project in Kenya (001, see Carloni and Horenstein). The project's strategy for improving production and preserving the agricultural resource base is to popularize bench terracing and water conservation in the semi-arid highlands while it carries out agronomic research to develop technical solutions suitable for the arid lowlands. The social soundness analysis for the Project Paper pointed out that women are the principal farmers and that, because of male migration, women's self-help groups would also be the main source of labor for project works such as construction of terraces and water catchments. It warned that if women were expected to supply free labor for soil and water conservation during the peak agricultural seasons, targets would not be met, and recommended that the project either pay for the labor or suspend the works during the peak season.

The original project design ignored the recommendation. Targets were set on the assumption that works would be carried on throughout the entire year. Ultimately, project management recognized that the original targets were not feasible and suspended work during the peak season so that women could finish their ploughing and planting. Recognition of women's economic responsibilities and time constraints has been a critical factor in securing their unpaid labor for soil and water conservation works. Achievement of project objectives is a direct result of women's high level of participation. The high level of participation is a direct result of project adaptation, which in turn was facilitated by gender analysis.

Project adaptation had an impact on the achievement of targets for construction of terraces and water catchments. It also had quantifiable economic benefits: the Kenyan Government assessed the value of women's unpaid labor contribution to the project at US$1.8 million, a direct savings to the project.

2.1.2 Mainstream Institutional-Development Projects

One of the main differences between institutional-development projects and direct-service projects is that the participants in the former are not farmers; they are government planners, agricultural research personnel, ministry of agriculture staff such as veterinarians and extension workers, or teachers and students in agricultural colleges and training institutes. The degree of match between the gender of project participants and the gender division of labor at farm level is less likely to be important for project efficiency. Under these circumstances, women's level of participation is mainly a matter of equity.

The desk review found little relationship between the gender of participants and achievement of objectives in agricultural planning, research, education, and extension projects unless some of their activities reached the farm level. In two agricultural sector planning projects (04, 95), women's participation was high because women constituted a relatively high percentage of the staff in the planning units of the ministries of agriculture. The presence of women on the planning staff had no relevance for the achievement of immediate objectives. Nor did it appear to increase awareness in ministry plans of the gender division of labor at farm level.

The case study of the Caribbean Agricultural Extension project (09, Schminck and Goddard) illustrates how difficult it can be in an institutional-development project to show whether gender makes a difference for the achievement of project objectives. After 7 years of planning and implementation, the project is achieving its stated purpose of improving national extension systems, but it is still too early to see the effects of these improvements on actual farm practices. Interviews with extension agents suggest that gender-linked farming practices can and should be addressed in extension work and that certain goals, such as increased vegetable production, will be affected if such adaptations are not made. Yet, the institution-building focus of the project so far allows for little, if any, assessment of direct impact of improved extension at the farm level.

2.2 Income Generation and Employment

A.I.D. gives high priority to expanding private sector employment as a strategy for raising the incomes and improving the quality of life of low-income people. In urban areas of developing countries, a large share of the small-scale enterprises in the informal sector are managed by female entrepreneurs. In newly industrialized countries, the majority of workers in labor-intensive, export-oriented industries are women. Eleven projects in the desk review sample and two more from the field studies aim at generating employment through vocational education, credit, or promotion of community-based income-generating activities (see the desk review by Lycette and Self, the case study by Lycette [49], and Blumberg's Dominican Republic case study [003]). Given the small sample and the heterogeneity of project types, quantitative analysis of relationships between variables in the conceptual framework was not attempted. Instead, projects were examined according to the type of intervention.

2.2.1 Job Training

There were three job training projects in the sample. Only one project was successful in expanding employment for women. This was achieved by adapting procedures for recruitment, training, and counseling of women entering the Ministry of Labor's industrial and commercial job training program in Morocco (49, see Lycette's case study). Two projects were unsuccessful in expanding women's employment. In Ecuador, women's level of participation in job training activities of the Tarqui Cooperative and Community Development project (27) was low because the type of training offered to women was of little value in getting a job. In Senegal, where women were expected to participate in sewing and tailoring courses as part of a youth job development project (38), no effort was made to adapt recruitment procedures to ensure that women would actually participate. As a result, women's level of participation was lower than anticipated. In the sector paper, Lycette concludes that it is much easier to train women successfully than it is to generate employment for them. She suggests that projects that provide credit so that trainees can set themselves up in or expand existing businesses are more likely to achieve the objective of employment creation than projects that only provide training.

2.2.2 Credit Projects

Women's participation in credit projects was linked to the number of female entrepreneurs operating in a given subsector, the up-front cost of borrowing, collateral requirements, and the minimum size of loans. For example, when loans were delivered to enterprises with relatively high levels of assets or the minimum size of loans was high, female entrepreneurs were usually excluded. In Burkina Faso, where 40 percent of the food processing loans from Village Development Funds were expected to go to women's microenterprises, the minimum size of loans was so high that microentrepreneurs were excluded. In contrast, the Entente Enterprises project (16) in five Francophone West African countries made no particular effort to reach women, but because the terms of lending did not exclude microenterprises, 25 percent of all loans went to women. Projects that adapted delivery systems and had high levels of female participation (16, 26) were more successful than those where lack of adaptation excluded women (28).

In the Dominican Republic (003), a project to provide short-term working capital to poor street venders and microentrepreneurs was unusually successful in removing the barriers that usually prevent the poor from getting credit. Specifically, red tape was minimal, loans were disbursed in a matter of days, and almost none of the loans required collateral. Although the project made no attempt to cater to women or to seek them out, the adaptations made by the project to remove obstacles to participation by the poor in general resulted in substantial proportions of women becoming loan beneficiaries. In total, 43 percent of the impoverished street vendors (organized into "solidarity groups") and 17 percent of the somewhat better-off microentrepreneurs receiving loans were women. Moreover, the women proved to be as good or better than men in their loan performance. Among the microentrepreneurs, women created more jobs than their male counterparts (an average of 1.5 new positions versus 1.3 for the men). Since employment generation was a principal objective of the project, the level of women's participation can be clearly linked to the achievement of project objectives.

2.2.3 Income-Generating Projects

The sample included several projects aimed at promoting income-generating activities for village women. Most were designed as women-only projects. Only one of the income-generating projects examined by the study was successful in achieving its objectives; this was the Latin America Regional Appropriate Technology for Women project (21, see the case study by Flora). Under that project, Flora found that subprojects in Bolivia were more successful than subprojects in Ecuador because they carefully analyzed women's existing income sources, their incentives to undertake new activities, and their time constraints.

On the other hand, projects in Burkina Faso (85, 86), El Salvador (17), and Ecuador (27) failed to achieve the objective of raising women's income and expanding employment because the activities were either inappropriate for the local setting, or poor women had no time for them, or they were unprofitable in relation to what women could earn from other sources.

Fortmann's desk review contains a detailed analysis of the difficulties encountered by the Africa Regional Women in Development project (05), which served as an umbrella for income-generating projects in several countries. In Casamance, Senegal, the income-generating scheme failed because of inappropriate technology, lack of interest, and lack of a market. In Kassack Nord, Senegal, handicrafts were promoted when women wanted palm oil presses and inputs for crops. In Sierra Leone, a female entrepreneur misappropriated funds intended to support the group's cloth-making enterprise. On the whole, the umbrella project's most successful activity was adult literacy and its least successful activities were income-generating schemes.

In Burkina Faso, the failure of an income-generating project for women was attributed to lack of precision at the design stage about the nature of the activities the project would support. Too much responsibility for the identification and formulation of income-generating projects was placed on the women's extension service, which had no expertise in assessing their economic feasibility and only limited technical backstopping capability. The evaluation report points out that "identifying needs at village level is not the same thing as identifying viable projects."

On the basis of the documentation used for the desk review, there is no evidence that income-generating projects for women have actually generated much income. Mainstream credit projects targeted to microentrepreneurs have been much more successful in raising women's income and generating employment.

2.3 Education and Training

Cross-national studies show a high correlation between mothers' education and variables such as fertility, infant mortality, children's nutritional status, and children's educational achievements. Female education also correlates with higher productivity in agriculture and employment. The relevance of gender for achievement of objectives in education projects is more direct in basic education projects than for advanced education and training. Nevertheless, equity in all human resource development is a desirable goal in and of itself.

2.3.1 Basic Education

A.I.D.'s Blueprint for Development calls for increasing primary school enrollment to above 90 percent for both boys and girls and raising adult literacy to above 50 percent for both men and women. The importance of gender for the achievement of these targets derives from the low literacy and school enrollment rates of females relative to males. Women's literacy rate is only 52 percent of men's in the Indian subcontinent, 57 percent in the Near East, 61 percent in Africa; in the Far East it is 81 percent and in Latin America it is 94 percent of men's (Sivard 1985). Primary school enrollment shows a similar pattern of sex disparities.

Yet few evaluations examined in the desk study sample considered sex disparities when assessing whether basic education projects had achieved their purpose. For example, evaluations rated an education technology project in Colombia (66) and a primary school reconstruction project in Honduras (62) as highly successful in achieving their stated purposes, even though they did nothing to reduce disparities between boy and girls' enrollment. A primary education project in Botswana (75) was also rated highly successful in achieving its objectives even though its impact on girls' school enrollment was extremely modest. In North Yemen, a basic education project (60) failed to achieve its objectives in spite of an increase in girls' school enrollment (from under 3 percent to about 12 percent). In light of the Agency's goals, basic education projects should give more importance to reducing the gender gap in education and literacy, and evaluation criteria should be adjusted accordingly.

2.3.2 Technical Education and Training

The implications of gender differences for the success of technical education and training projects are less easy to demonstrate.

The case study of the Agricultural College Expansion project in Botswana (54, see Anderson and McBreen) illustrates this. Project design documents emphasized that the Botswana Agricultural College should make special efforts to integrate women into its certificate- and diploma-level training programs on the assumption that additional female extension workers would help improve agricultural production in a situation where 40 percent of the rural households are headed by women. When the project was designed, there were only six women enrolled in the agricultural program and only five female extension workers. Subsequently, female enrollment increased from 20 percent in 1978 to 39 percent in 1984. In 1985, however, the Government limited the intake of female students to 15 per year (or 10 percent). The stated justification for this change in policy was that female graduates had proven "difficult to place" as extension workers in rural areas. In spite of this limitation on female enrollment, the evaluation team rated the project as highly successful in achieving its purpose, and did not address nor analyze the implications for contact with large numbers of female farmers by predominantly male graduates.

2.4. Energy

The Blueprint for Development states that A.I.D. should give priority to assisting governments to develop sound energy policies and to providing technical assistance for research in fuelwood production and related energy-conversion technologies. To date, A.I.D.'s energy projects have tended to recognize the role of women primarily as collectors and consumers of fuel for domestic use. The desk review by Davenport shows that this view is too narrow: gender issues are also significant in the development and conservation of natural resources, including afforestation, watershed management, and agro-forestry.

The cases examined in this evaluation represent a small fraction of A.I.D.'s total energy portfolio because only 10 energy projects in the data base made any reference to "women" or "gender" in their documentation. In 8 of the projects, women were expected to participate directly in testing improved cookstoves (5 cases), as nursery workers (3 cases), as forestry staff (2 cases), and as laborers on reforestation sites (1 case). In 7 projects, women were also expected to benefit indirectly from increased supplies of fuelwood.

2.4.1 Cookstove Components

Cookstove components rarely achieved their objectives. The problem in Burundi (74) was that the stove did not save as much fuel as anticipated. In Nepal (002, see the case study by Davenport, Nickell, and Pradhan), the stoves were unsuitable for many types of cooking, so women continued to use the traditional hearth alongside the smokeless stove. In Lesotho (72), where village women were consulted about their preferences, the level of acceptance was better. In Honduras (64), use of the stoves did not spread because there were few female extension workers whom the project could use to disseminate the stoves. The desk review found that baseline studies on women's actual patterns of fuel use and preferences (72, 64) led to better design (see Davenport).

2.4.2 Fuelwood Components

Fuelwood components failed to achieve their objectives for reasons unrelated to women's participation. In two cases, there was a problem of drought (71, 73). Also, in the Sahel Regional Program (71) the wood from project woodlots was too expensive to compete with alternative sources. And in Senegal (73), where women were expected to benefit from the creation of nursery jobs, men got the jobs.

2.4.3 Biogas

Two of the problems encountered with a biogas plant in Nepal--inadequate supply of manure for the digestor and limited demand for milling services--are gender-linked. Although women provide 90 percent of the labor for feeding manure into the digestor and are responsible for grinding grains, they have no voice in the plant's management, cannot afford the plant's costly milling fees, and give manure to the biogas plant only very reluctantly because they need it as a source of cooking fuel (002, see Davenport, Nickell, and Pradhan).

2.4.4 Reforestation

The case study of the Resource Conservation and Utilization project in Nepal (002, cited above) indicated that gender-linked labor constraints were probably a factor in the failure to achieve forestry targets. Although women are the preferred laborers for nurseries and tree planting, in Gorkha District the project could only get children to work because the timing of planting conflicted with women's farm planting.

2.5 Water Supply and Sanitation

In developing countries throughout the world, women and girls have the primary responsibility for collecting and utilizing water for domestic purposes. They also have major responsibilities for family hygiene, household sanitation, and waste disposal. The desk review sample covered 18 projects in three regions (Latin America, Africa, and the Near East). Some projects were rural; others were in urban slums. In most cases, the project purpose was to design and construct physical infrastructure such as village water supply systems, waste disposal systems, and latrines. In a few cases, the project purpose was institutional development. In addition to the 17 projects covered by the desk review, 2 of the 10 case studies examined domestic water supply components in larger rural development projects (001, 002).

In the design documents for the 18 projects covered by the desk review, women tended to be viewed as passive beneficiaries of improvements in water supply and sanitation rather than as active participants. Although 15 of the 18 water supply projects included health and hygiene components, these were usually targeted to "families" or "people," without regard for women's leading role in these activities.

Likewise, 15 of the 18 projects called for community participation in self-help construction and maintenance activities, but only a few sought to actively involve the end users--women--in these activities (32, 33, 41). Only one project (33) made a special effort to increase women's participation in, and benefit from, the project by providing extension workers to work with women on such complementary activities as health, hygiene, sanitation, and vegetable gardening (using waste water from the pumps).

In spite of the fact that many projects defined their purpose in such a way that it could be achieved without direct contact with the end users, a strong positive correlation was found between women's level of participation and achievement of objectives. In fact, all of the projects in which women's participation was known to be high were highly successful in achieving their immediate objectives (34, 39, 41, 47). The project in which women's participation was known to be low failed to achieve its objectives (37). In this latter case, project failure could clearly be traced to failure to consult water users about their preferences.

2.5.1 Design of Water Supply Systems

Findings from the desk review suggest that designs based on baseline studies of women's actual patterns of water use (34, 41) were more successful than designs based strictly on technical criteria (37). The same finding applies to the choice of technology: in two Central American countries, a particular hand pump's high acceptability to women and its suitability for use by young girls was a factor in project success (36).

2.5.2 Construction and Maintenance of Water Supply Systems

The desk review found a definite relationship between women's time constraints and levels of participation in self-help and water-user groups. Projects that failed to consider the opportunity cost of women's time were less successful in mobilizing their labor (see Nieves).

Maintenance of water sources was better when women were involved in maintenance committees, but there is evidence that user involvement, by itself, is not enough; it needs to be complemented by competent technical support if proper maintenance is to be sustained over time.

The case study of the Arid and Semi-Arid Lands project in Kenya (001) presents some intriguing findings regarding women's role in the construction of dams and catchments for village water supply. Initially, all of the projects carried out by the Ministry of Water Development (MOWD) used hired male labor, while water projects carried out by the Ministry of Agriculture and Livestock Development (MALD) used women's self-help labor. Due to labor problems, MOWD was never able to meet its targets. Comparison revealed that MALD's participatory system was cheaper and more efficient. As a result, the project is now using women's self-help groups for all of its water development and conservation works. Women's self-help labor for the construction and maintenance of water sources has greatly reduced Government costs and improved sustainability (see Carloni and Horenstein).

2.6 Regional Variations

Regional variation in the gender division of labor and resources is greatest in the agriculture sector. Women's role in activities related to domestic water and fuel supply is more constant across regions. In the informal sector of the urban economy, female entrepreneurs play an important role in all four geographic regions, in spite of considerable variation among countries. In the education sector, the gender gap is greatest in the Indian subcontinent, the Near East, and Africa.

These differences in the baseline situation are only partially reflected in the projects examined in this evaluation. Although the sample cannot be considered as representative of the various regions, some trends are worth noting. Projects in Africa gave more attention to gender differences than projects in any other region. Projects in Asia gave the least attention to gender. Projects in Latin America and the Near East were somewhere in between.

In the projects in Africa, gender differences were analyzed mainly in agriculture and energy projects. A few education projects analyzed gender differences. Water supply projects gave more attention to gender roles than did such projects in other regions. Employment projects paid relatively little attention to gender differences.

As a result of this analysis, resources in agriculture and education projects were targeted to women through women-only projects and women's components; in energy projects, resources were targeted through cookstove components. Employment projects did not target resources to women. Gender analysis was rarely followed by adaptation of institutions and delivery systems. For this reason, access to delivery systems emerged as a major bottleneck restricting the flow of resources to women.

In the projects in Asia, gender differences were analyzed in energy projects (63, 68, 69, 70, 002) and a few of the agricultural projects (92, 94). The energy projects targeted cookstove components to women. One of the employment projects targeted training (98). None of the agricultural projects targeted resources specifically to women. The assumption seemed to be that technical advice delivered to the husband would "trickle over" to the wife. The presence of substantial numbers of female extension workers may have led project designers and implementers to overlook constraints affecting outreach to female farmers. As in Africa, institutional constraints were a major bottleneck.

In the Near East projects, several projects analyzed gender differences but only two projects targeted resources to women, one through a women-only project and one through a women's component (both in Morocco, 48, 49). Lack of analysis and adaptation of delivery systems restricted women's actual participation in, and receipt of resources from, mainstream projects.

In the projects in Latin America, mainstream projects analyzed gender differences primarily in the agriculture sector (06, 09, 13, 22). In three sectors (agriculture, employment, and education) limited resources were targeted to women through women-only projects (20, 26, 57, 58) and women's components (27, 09). Rural development projects targeted few resources to women, and when they did, the emphasis was exclusively on women's domestic roles. As in other regions, women's participation and benefit were restricted by inadequate analysis of institutional and labor constraints and consequent lack of adaptation of technical packages and delivery systems.

2.7 Conclusions

Evidence from four sectors (agriculture, employment, energy, and water supply) supports the hypothesis that projects are more likely to achieve their objectives when the gender of project participants reflects the baseline division of labor in project-related activities. The finding holds for direct-service projects that seek to introduce change at beneficiary level. It applies to institutional-development projects only insofar as these projects reach the grassroots level.

In the same four sectors (agriculture, employment, energy, and water supply), baseline studies on the division of labor led to better design. In these sectors, the efficiency of direct-service projects would clearly be enhanced by institutionalizing three activities: (1) analysis of gender roles and their implications for the project strategy, (2) project adaptation in the light of analysis of gender roles, and (3) regular monitoring to ensure that the gender of project participants matches gender roles in the baseline situation.

The education sector is somewhat anomalous in that the gender division of labor is largely irrelevant for project efficiency. Equity--in this case narrowing the gender gap in basic education and literacy--is the main policy concern. This concern could be furthered by placing greater emphasis on identifying institutional and other barriers to women's participation in education and training activities, removing these barriers through project adaptation, and monitoring the gender of participants on a continuous basis.

Findings from all five sectors show that analysis of gender differences has little effect on the achievement of project objectives unless women actually participate in and benefit from the project. Adaptation of institutions, delivery systems, and technical packages in the light of gender differences appears to be the key to higher participation and greater benefit. (Section 4 of this paper examines the process of project adaptation in greater detail.)

3. THE IMPORTANCE OF GENDER FOR THE ACHIEVEMENT OF SOCIOECONOMIC DEVELOPMENT GOALS

In each of the five sectors examined in this evaluation, projects tend to share a common set of goals. The ultimate goal of most agricultural projects is to improve the social and economic well-being of small farm households by increasing production, raising incomes, and (sometimes) reducing malnutrition. The goal of most employment projects is to create jobs and raise incomes of poor households. The goal of most energy projects is to improve well-being by developing new energy sources and conserving natural resources. The goal of most water supply and sanitation projects is to improve the quality of life. The goal of most education projects is to improve well-being directly, through human capital formation, and indirectly, by imparting skills relevant to the achievement of other goals.

This section of the paper takes five goals as its starting point: increased agricultural production, development and conservation of natural resources, employment generation, higher incomes for low-income people, and reduction of malnutrition. Using evidence from the desk reviews and especially the 10 case studies, it examines which aspects of gender affect the achievement of each goal.

3.1 Increasing Agricultural Production

The importance of gender for agricultural production derives from the gender-linked division of labor in small farm households. According to a recent study covering 82 developing countries, women are 46 percent of the agricultural labor force in Sub-Saharan Africa, 45 percent in Asia, 40 percent in the Caribbean, and 31 percent in North Africa and the Near East (Dixon 1982). The production tasks performed by women and their share of the total farm work vary widely between countries and among different social, economic, ethnic, and regional groups within countries. Women's agricultural role is also affected by age, marital status, the husband's presence or absence, and the stage in the household development cycle.

Section 2 showed that in agriculture projects the degree of match between the gender of project participants and gender roles in the baseline situation affects the achievement of immediate project purposes. This section goes a step farther. It takes four aspects of gender identified by the Women in Development Policy Paper and examines evidence (primarily from the case studies) of their effect on the achievement of such goals as the intensification and diversification of small farm production and the transfer of technology to low-income producers. The four aspects are as follows:

-- Access to and control over productive resources
-- Gender-linked labor constraints
-- Control of crops and income from their sale
-- Stakes and incentives

3.1.1 Gender Access to Resources as a Factor in Production

Access to Extension Services. Five of the case studies examined women's access to extension advice and the implications for agricultural production (Botswana, the Caribbean, Thailand, Kenya, and Nepal). In all five cases there was evidence that failure to reach female farmers can have a negative impact on efforts to increase production. In Kenya, there was a dramatic increase in outreach to female farmers when extension workers began contacting local self-help groups instead of individual contact farmers, which could have equally dramatic effects on the spread of innovations (see Carloni and Horenstein).

Another finding that emerged from the case studies is that in this group of countries at least, female extension workers do not appear to be the major factor in reaching female farmers. Some extension workers in all five countries were women, but their contact with female farmers was not necessarily better than that of male extension workers. On the contrary, both male and female extension workers tended to focus on male farmers. One reason for the lack of contact with female farmers was the prevailing emphasis on commercial farming and cash crops. Extension workers had few incentives to spend time with subsistence farmers. In Botswana, extension workers of both sexes tended to focus on men because village women's family responsibilities made it more difficult for them to travel to extension centers. Direct contact by agents of either sex with village women was often restricted by inadequate transport (see Anderson and McBreen).

Access to Land. In Sri Lanka, where outmigration of daughters from the settlement schemes threatens to undermine the long-range viability of the Mahaweli program, outmigration seems to be connected with the fact that daughters are not allowed to inherit land (see Benson and Emmert). Differences in the status of women among different categories of settlers could also be traced to the fact that among local people who were temporarily moved off the land to make room for the project (referred to as "former residents" and "evacuees"), women could get irrigated land allotments in their own name while among new settlers only men were given allotments.

All Mahaweli scheme households are expected to take out seasonal production loans, but among new settlers, widows and wives of migrants are unable to borrow because the land is in the husband's name. Among former residents and evacuees, the share of loans disbursed to women was roughly proportionate to the percentage of women owning land. When land title is a prerequisite for access to credit and many female farmers are unable to qualify for loans, allocation of resources is inefficient and production suffers.

3.1.2 Gender-Linked Labor Constraints as a Factor in Agricultural Production

Male Migration. As a result of the sex-typing of agricultural tasks, shortages of male labor for land preparation can cause serious bottlenecks in production. In Thailand, a green manure crop intended to fertilize rice did not get planted because men were not there to prepare the land during the dry season. In Botswana and Kenya, male migration caused bottlenecks in land preparation that led to late planting and lower yields. Migration of young men from the Eastern Caribbean affected the supply of labor for such heavy work as terracing and planting tree crops.

Aggravation of Women's Work Load. The field studies provide many examples of situations in which the burden of intensified cropping systems or other new practices fell primarily on women. In Thailand, this led families to drop out of on-farm trials (see Blanc-Szanton, Viveros-Long, and Suphanchainat). In the Caribbean, where the burden of field packing bananas fell on women, it led them to pressure their husbands to get out of banana production (see Schminck and Goddard). In Guatemala, where contract vegetable growing increased the demands on women's time, they had less time to earn an independent income from marketing (see Blumberg). This in turn had implications for family well-being.

Conflict Between Project Activities and Women's Role in Farming. In Kenya, conflict between the timing of project soil conservation activities and women's work on the farm slowed progress until management recognized the need to adjust work schedules so that they would not interfere with farming (see Carloni and Horenstein). In Nepal, conflict between the timing of project tree-planting activities and women's farm planting may have contributed to the forestry component's failure to achieve more than 35 percent of its target (see Davenport, Nickell, and Pradhan). In Ecuador, conflict between the timing of project citrus-processing activities and the peak season for female wage employment in the citrus harvest led to a low rate of participation in one project enterprise (see Flora).

Women's Domestic Responsibilities. In several cases, the projects' impact on production was lowered because women's domestic responsibilities interfered with their role in agriculture. On the Mahaweli irrigation/settlement schemes in Sri Lanka, lack of extended family networks for the care of small children has hampered wives' availability for work on the irrigated allotments (see Benson and Emmert). In Kitui District, Kenya, one reason women cannot plough and plant at the onset of the rains is that half of their productive time is taken up fetching water from distant sources (see Carloni and Horenstein).

The desk review of water supply and sanitation projects found that reduction of time spent carrying water did not increase time spent on production unless income-earning opportunities already existed or were introduced (see Nieves). To have a positive impact on production, water supply projects must be linked to income-earning opportunities in agriculture or nonfarm production. Only one of the water supply projects in the desk review sample included an agricultural component (33).

3.1.3 Gender Differences in the Control of Product as a Factor in Agricultural Diversification

In the Eastern Caribbean, where many countries give diversification high priority as a way of reducing dependency on one or two export crops, extension agents say that women are more responsive to diversification possibilities than men. The reason for this difference may be that men control the large monetary aspects of the farm (including the main cash crops) while women control the minor crops. Men have a stake in perpetuating the emphasis on the traditional export crops that they control, whereas women have a stake in expanding production of minor crops such as vegetables, which are part of the diversification strategy (see Schminck and Goddard).

In Sri Lanka, one of the main problems faced by the Mahaweli irrigation and settlement program has been lack of diversification of the farming system. In most places there is not enough water to grow two irrigated crops per year. Reliance on a single rice crop has created seasonal cash shortages and malnutrition. Recent efforts to diversify food and income sources focus on intensifying production of fruit, vegetables, and spices on the homestead plot and integrating them with animal production. Because the homestead garden and livestock care are the wife's domain, recognition of gender differences in the control of different crops and activities could have important consequences for diversification (see Benson and Emmert).

3.1.4 Gender Differences in Incentives as a Factor in Production

Women's incentives to provide unpaid family labor for crop and livestock production are closely linked to the control of crops. When women control the disposal of the product and the earnings from its sale, their incentive to intensify labor inputs is far greater than it is for crops whose disposal is controlled by their husbands. This factor is more important for cash crops and sidelines that men and women treat as a source of personal income than for staples that all family members consume.

In Guatemala (004), a 1980 comparison of three poor Indian villages growing broccoli, cauliflower, and snow peas on contract to an agribusiness firm revealed a significant pattern. The level of yields and the production of first-quality produce appeared to be related to the extent to which women participated in--and benefited from--the project. In the first village, women did not help in the fields, and the project did poorly for lack of sufficient labor. In the second village, women had been pulled into field work on these very labor-intensive vegetables. But this reduced their time available to earn independently controlled incomes as market venders. Moreover, payment came in the form of a check made out exclusively to the husband, a check that had to be cashed in a town some distance from the village. Project performance was better than in the first village, but not outstanding. In the third village (where the growers were organized into a cooperative), however, women not only worked in the fields, they benefited directly. They were relatively full partners in the contract farming, and the co-op paid both husband and wife individually in cash. In this village, yields and quality of produce were by far the highest. Interestingly, village women fared best working in the agribusiness firm's processing plant, where the vegetables were frozen and packed for export. They worked long shifts at the government minimum wage and earned unusually high incomes over which they retained full control. Both job satisfaction and productivity were extremely high. Thus it appears that the level and quality of production were related not only to the extent to which women participated in project activities but also to the extent to which they were given incentives and allowed direct control over remuneration.

3.1.5 Gender as a Factor in the Development and Transfer of Technology to the Rural Poor

The experience of the Northeast Rainfed Agricultural Development project in Thailand (94) illustrates why adapting to the gender of project participants is important for technology transfer to the poor. About 10 percent of the households in the project area were permanently headed by women, and in addition, men left the district during the slack season in search of wage employment. Until now the project has concentrated on "specialist" farmers who are selected to carry out crop trials. These farmers have all been men, and what is more, they have more land, labor, and capital than other farmers. By concentrating project resources on the better-off specialist farmers, the project ran a serious risk of developing modified cropping systems that are beyond the means of the target group. Since so many poor households depend on women for farm management, efforts to involve poor women would have been useful as a source of feedback about their reaction to project packages and their constraints to adopting them (see Blanc-Szanton, Viveros-Long, and Suphanchainat).

The experience of the Arid and Semi-Arid Lands project in Kitui District, Kenya (001) illustrates how targeting extension to women can dramatically improve technology transfer to the poor. In an area where up to 60 percent of the adult males were working outside the district, the households selected as contact farms when the Training and Visit System was first introduced were atypical in two ways: they had more land and assets, and the husbands were full-time farmers. A farm survey conducted by the project indicated that the resources concentrated on contact farmers were not paying off because innovations were not spreading to the average farmer. Consequently, indigenous self-help groups (80 percent female) were substituted on a pilot basis.

Instead of contacting individual farmers, extension workers made direct contact with groups as large as 30 members. The pilot experience was so successful that the practice is being extended to the rest of the district. It has greatly improved the extension system's contact with women and the poor and is laying the groundwork for widespread technology transfer. The project will use these self-help groups to test and disseminate a wide range of technical innovations including drought-resistant varieties, water-saving tillage methods, disease-free cassava cuttings, farm implements, tree seedlings, and improved beehives (see Carloni and Horenstein).

3.2 Developing and Conserving Natural Resources

The direct connection between women's stakes and incentives and conservation of natural resources is illustrated by the Arid and Semi-Arid Lands project in Kenya (001). Initially, project planners feared that women's self-help (mwethya) groups might not supply sufficient labor for construction of terraces, dams, and catchments without cash compensation. When mounting financial pressures forced the Government to cancel plans for payment to mwethya groups, they discovered, to their surprise, that lack of payment was not a constraint. Village women were willing to provide unpaid labor for soil conservation works because terracing allowed them to make better use of scarce run-off for crop production; they were willing to provide labor for construction of water points because they would benefit directly from not having to haul water long distances (see Carloni and Horenstein).

The case study of the Resource Conservation and Utilization Project in Nepal (002) illustrates how a project's impact on resource conservation might have been greater if the women's component had not focused so narrowly on women's domestic roles (cookstoves, kitchen gardens, and sewing). The stove component appears to have diverted attention from involving women in the project's broader resource conservation activities, including afforestation, watershed management, and soil conservation. The impact of the women's component's on resource conservation has been less than anticipated because the new stoves are not as versatile as the traditional hearth; women who have them use them for only a part of their cooking.

3.3 Generating Employment

Many projects in this sector achieved their immediate purpose but stopped short of achieving the ultimate goal of expanding employment. Of the three types, credit projects were the most successful in expanding female employment. Most female job training projects and community based income-generating projects encountered difficulties. Projects that provided skills training for self-employment without providing seed capital so that trainees could set themselves up in business also failed to generate female employment.

In Morocco, a project designed to integrate women in the Ministry of Labor's commercial and industrial job training program (49) was one of the few of its type that was successful in achieving its goals. Not only did it expand female employment at favorable wage levels, but the entry of female graduates into the sector also eased bottlenecks at a time when the supply of skilled labor was a constraint for industrial expansion. Female trainees performed well in courses, and the implementing agency had no difficulty placing graduates in private sector jobs. In fact, employers were so pleased with the performance of female graduates that they expressed a preference for women in the future. And finally, as a result of the project, women's participation in the Ministry of Labor's national system of vocational schools has been institutionalized (see Lycette).

In the Dominican Republic microenterprise project (003), Blumberg found, after disaggregating project statistics by sex, that the women microentrepreneurs created more jobs than the men. The contrast was most dramatic in the large and important clothing sector (one-half of all female microentrepreneur loan clients were in the clothing sector, and one-half of the businesses in the sector were female owned). Women's clothing enterprises have created an average of 1.4 new jobs each, compared with 0.64 for male-owned clothing businesses. Disaggregating data for the clothing sector by sex also showed that the women's enterprises were growing faster than the men's on five of six standard business indicators (e.g., sales, profits) tracked by the project. Thus, achievement of project goals for stimulating jobs and economic activity in the informal sector was clearly linked to the level of female participation.

3.4 Raising Incomes of Low-Income People

Among poor households in both rural and urban areas, diversification of income sources is crucial for survival. Family members engage in a wide range of income-earning activities in different seasons to spread risks. The share of total income earned by wives and daughters can be major.

Case studies revealed that where male migration is widespread, as in Botswana (54), Kenya (001), and the Caribbean (09), women's earnings are the mainstay for everyday subsistence expenditures, especially food. Growing dependence on women's earnings was also cited in urban Morocco (49) and the Dominican Republic (003). In one community in Bolivia, women's earnings from handicraft production were crucial for tiding their families over during a drought year when no earnings were coming in from agriculture (21, see Flora). In Sri Lanka's wet zone, women's sale of eggs and milk, as well as fruit, vegetables, and spices from the homestead garden, provides a steady trickle of cash year-round. On the Mahaweli settlement schemes, where serious difficulties with the seasonal cash flow threaten to undermine development, expansion of women's homestead garden production may provide solutions (91, see Benson and Emmert).

The proportion of their income that different earners pool with the rest of the family or keep for their personal use varies widely among socioeconomic groups and household types within countries. In Bolivia, Ecuador, Guatemala, the Eastern Caribbean, Kenya, Sri Lanka, and Thailand, the case studies confirmed that husbands treat earnings from certain crops or activities as their personal spending money. If the earnings from the sale of a cash crop are customarily treated as the husband's personal income, a project that raises production may well have the effect of merely increasing the husband's nonessential consumption without improving family well-being.

In Thailand, Kenya, and the Eastern Caribbean, women generally manage whatever money is pooled for everyday family expenses. In Ecuador, where husbands usually manage household cash, wives have difficulty keeping control over how their own earnings are spent. Women in one village preferred to disburse profits from the group enterprise once a year rather than monthly, and in kind (food, household utensils). They stated they were afraid that if they received cash, their husbands would take the money and spend it on ritual drinking (see Flora). (This suggests one reason why the profitability of women's income-generating projects is hard to document: women may feel the need to conceal their earnings from their husbands.)

As noted above, case studies in Kenya, Botswana, and the Caribbean found that it was usually the wife's earnings rather than the husband's that were used to buy food for the family. The baseline study in St. Lucia found that women were solely responsible for paying for the family food in 37 percent of the households (food represents 40 percent of total expenditures) (see Knudson and Yates). Implications for nutrition are discussed below.

3.5 Reducing Malnutrition

A growing body of evidence suggests that there is no necessary connection between increases in aggregate household income and improvements in children's nutritional status. There is increasing evidence that it is the mother's income-earning activities that show the higher correlation with children's nutrition rather than the father's (Kumar 1977; Carloni 1983).

Women's importance for nutrition extends far beyond their traditional roles in food preparation and infant feeding. They influence household food availability directly through their role in food production, processing, storage, and marketing and indirectly through their activities as income earners. In some countries, women bear the entire responsibility for providing the family food. In other countries, husbands are expected to provide certain foods (such as staple grains) for family consumption, while wives provide complementary foods. A thorough understanding of gender roles in food production and consumption is needed when the goal is to improve nutrition.

The case study of the Mahaweli irrigation and settlement program in Sri Lanka (91) illustrates the connection between women's role in food systems and efforts to reduce malnutrition. The Mahaweli authorities attribute malnutrition to lack of differentiation in the diet caused by lack of diversification in the farming system. Before the Mahaweli Authority began to develop the area, the traditional diet was much more varied. Tank-irrigated paddy cultivation on the lowlands was complemented by shifting (chena) cultivation in upland areas, where finger millet, grains, pulses, and vegetables were grown. Women assisted men with weeding and harvesting paddy, and men assisted women with clearing and burning the upland area in preparation for planting, but paddy production was regarded as men's responsibility and chena cultivation as women's. Curtailment of chena cultivation (which the Government sees as a cause of environmental degradation) has unbalanced the food system. A possible solution would be to intensify production of complementary foods on the homestead plot and to introduce livestock into the farming system. This would provide a steady supply of food throughout the year, diversifying the diet and counteracting the effects of the seasonality of paddy production. Both of these activities are traditionally women's domain, and efforts to improve nutrition would entail supporting women's productive activities (see Benson and Emmert).

The case study of an agribusiness project in Guatemala (004) found evidence that women's loss of decision-making power within the family can adversely affect nutrition. Comparison of three contract grower villages revealed that women's control of an independent income has a great impact on their voice in decisions regarding food and nutrition. When the introduction of the labor-intensive vegetables reduced the time available for women to sell in the market, they lost their voice in decisions regarding which crops to grow. Men over-invested in the agribusiness company's crops to the detriment of other crops. When a crisis of over-production hit in 1980 and contract buying was suspended, families had nothing to fall back on and little money to buy food. In another village, where a recent (1984) change in the mode of payment undermined women's access to and control over income from contract buying, women lost much of their voice in deciding how much of which crops the family should grow. In addition, they lost much of their voice over how the money was spent. Aggregate incomes rose sharply, but co-op staff suggested that nutrition was negatively affected when expenditure shifted in favor of male-determined decisions (see Blumberg).

3.6 Conclusions

The lack of relationship between the achievement of immediate project purposes and long-term goals continues to be a sensitive point for development assistance. Many projects that are successful in their own terms have a limited socioeconomic impact. Gender analysis is a tool that can shed light on the causes of this problem.

The case study of the Caribbean Regional Agricultural Extension project (09) provides a good illustration. Although the project was rated as highly successful in achieving its immediate purpose of building national extension systems, it is not clear whether the project will achieve one of its ultimate goals, the diversification of small farm production. Even a rigorous preproject analysis of women's productive roles in island agriculture, and a women's component emphasizing awareness training in gender issues, did not translate into field-level adaptations in extension. Implicit in the strategy to achieve import substitution through diversifying and intensifying vegetable crop production is the need to engage female farmers in the effort. Yet to date, the extension workers are not being trained in techniques or equipped with incentives for women farmers as a particular target group. While extension agents, ministry, and project staff all recognize the key role women will play in achieving diversification targets, the next steps (adapting extension agent work plans and technical packages, developing communication networks, scheduling and locating demonstrations for gender-specific audiences) have yet to be taken. The case study suggests that without these specific gender-responsive adaptations, the improved extension systems may fall short of achieving the national agricultural development goals the newly improved extension systems are pursuing (see Schminck and Goddard).

The case study of the Agricultural College Expansion project in Botswana (54) provides another illustration. The project was rated as highly successful in achieving its immediate purpose of developing an agricultural training institution suited to the rural sector's needs. However, it may not achieve its ultimate goal of improving the social and economic well-being of the vast majority of farm families if the extension service continues to bypass female farmers whose role in agriculture is major (see Anderson and McBreen).

These two examples have a common thread. Both projects achieved their immediate purpose, but the lack of match between gender roles in the baseline situation and the ultimate recipients of extension services provided by the improved institutions could prevent the projects from achieving their goals. In both cases, gender analysis provides important insight, but gender adaptations are crucial to success.

Another set of examples illustrates a different lesson. A project can be successful in achieving its immediate objectives of raising productivity and expanding employment; it can also be successful in raising beneficiary incomes; but it can still fail to achieve the ultimate goal of improving the social and economic well-being of low-income households if gender variables are overlooked. The case study of the ALCOSA Agribusiness Employment/Investment Promotion project in Guatemala (004) shows that increases in one family member's income do not necessarily result in better nutrition or greater well-being for the rest of the family. When women's control of earnings dropped and their voice in household decisions and expenditures fell, there was evidence that nutrition deteriorated even in the face of overall abundance (see Blumberg).

In short, the relationship between achievement of immediate project purposes and long-term socioeconomic goals is neither linear nor automatic. It can never be assumed that institutional development or delivery of services will automatically increase production or generate employment, or that increased production or higher employment automatically means higher incomes for low-income people, or that increases in one family member's income automatically are translated into better nutrition and improvements in the whole family's well-being. Gender variables intervene at every step in the chain in critical ways:

-- Planning for gender factors in production--including access to and control of resources, labor constraints, and incentives--is particularly useful for development and successful transfer of technology.

-- Planning for differential male and female income sources is particularly useful for efforts to raise the level of living of the poor.

-- Planning for gender roles in consumption, including whose income is used to buy food, can be crucial for ensuring that higher incomes result in better nutrition and family well-being.

The evaluation findings support the assertion in the Women in Development Policy Paper that "misunderstanding of gender differences, leading to inadequate planning and designing of projects, results in diminished returns on investment." The evidence shows that resources invested in improving gender analysis, project adaptation, and monitoring of female participation can not only help projects to achieve their immediate purposes more efficiently, but more important, it can help the Agency to ensure that resources invested in projects contribute to the achievement of broader development goals.

4. PRACTICAL SUGGESTIONS FOR PROJECT DESIGN AND IMPLEMENTATION

The evaluation shows that understanding gender differences has a visible payoff in better projects. The challenge now is to translate that understanding into action. This section gives practical suggestions on how to carry out gender analysis and how to adapt projects in the light of gender differences.

4.1 Gender Analysis: Timing in the Project Cycle

What we have come to understand as gender analysis is an activity that should extend throughout the life of the project, from design to implementation and evaluation. At the design stage, gender analysis should be done by the person responsible for the project's economic and social analysis. This person should be a member of an interdisciplinary project design team. During project implementation, gender analysis can be handled by project management. At the evaluation stage, a social scientist's expertise is desirable. There is no need for the gender analyst to be a women.

At the design stage, gender analysis ought to be an integral part of both the social and the economic analyses of projects.

-- Economic analyses should specify who (men, women) control the main factors of production (land, labor, and capital); consider labor requirements separately for male and female tasks; specify the differential off-farm earning capacity of men and women; and calculate whether direct returns to labor provide adequate incentives for increased production. The composition of household income by source and earners should also be examined.

-- Social analyses should examine gender roles in the baseline situation and how these intersect with project goals and activities; identify target groups for each activity in the light of the division of labor and gender roles; examine the outreach of existing institutions and delivery systems to the target group; assess the appropriateness of proposed technical solutions to the needs and resource base of each category of participant; and specify how to adapt delivery systems and technical packages in the light of gender differences.

During project implementation, internal reporting systems should provide feedback on the relative proportion of project resources that are going to men and women and to various socioeconomic groups. Project management needs this feedback to make certain that the project is reaching the right people. The definition of what mix of men and women is "right" depends on existing gender roles.

-- Reporting forms should provide separate totals for male and female participants in project-organized activities and recipients of inputs such as equipment and loans.

-- Periodic meetings should be held with beneficiaries to sound out their reactions to project interventions; separate meetings with women may be necessary to encourage them to voice their point of view.

Gender analysis should also be an integral part of evaluation activities. Numerical indicators of outputs and achievements (e.g., number of trainees) should be complemented by information on participants' gender and socioeconomic status. Cases of unsuccessful technology transfer should be examined to clarify whether gender differences in access to delivery systems, labor constraints, or incentives stemming from control of crops could explain why innovations have not spread.

4.2 Data Requirements and Costs

To design, implement, and evaluate projects, two things are needed: (1) at least a minimum of information on gender differences in labor allocation and access to and control of resources and (2) the analytic ability to relate this information to project design and implementation. The information can be obtained by low-cost, rapid techniques; formal surveys are usually unnecessary. Cost should not be an obstacle because findings show that resources spent on understanding the baseline situation have a direct payoff in project efficiency.

4.3 The Process of Gender Analysis: Ten Steps[2]

Step 1: Clarify gender roles and their implications for project strategies. The starting point should be to clarify the project strategy. For example, what does the project propose to do to improve agriculture? What activities will be affected by project interventions? What is the existing division of labor in these activities? How do these activities fit in with the total pattern of household productive and domestic activities? What innovations are being proposed? What are their behavioral implications for different household members?

Step 2: Analyze eligibility to receive project inputs. Start by examining what inputs the project intends to provide, and identify which household member should receive them, in light of the existing division of labor. For example, if livestock is women's responsibility and grain is men's, inputs for livestock should go to women and inputs for grain to men. If women are responsible for an activity slated for project intervention, can they qualify to receive inputs in their own name? What are the prerequisites for eligibility, and how many households in the target group can meet those criteria?

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[2] Gender analysis needs to be undertaken for projects in every sector. The 10 steps used here illustrate the process for agriculture projects.

Step 3: Define prerequisites for participation in project activities. In the light of the division of labor, which household member should participate in activities such as soil conservation, water user groups, training, and extension? Even if there is no formal discrimination against women, how will the location and timing of activities affect their participation? Does the proportion of women in the pool of eligible participants match the division of labor?

Step 4: Examine outreach capabilities of institutions and delivery systems. If analysis of the division of labor shows that an activity slated for project intervention is women's responsibility among smallholders, to what extent do existing institutions and delivery systems have direct contact with female smallholders, or with any women (e.g., the well-to-do).

Step 5: Assess the appropriateness of proposed technical packages. Are the technical packages applicable to all households or only to those with certain types of resources, such as irrigated land, several head of cattle, or a labor surplus? How many households in the target group have the right kind of land? How many, given the sex-typing of tasks and male migration, can meet the additional labor requirements? How many can raise the necessary cash? What implications do gender differences have for the spread of technical innovations to poor households?

Step 6: Examine the distribution of benefits and its effect on incentives. Given the gender division of labor and the control of income from different crops by men and women, what interest would women have in intensifying production? Do the direct returns to women outweigh the additional effort? If the project affects marketing, are women likely to lose an independent source of income?

Step 7: Consider the reliability of feedback mechanisms. If women play a major role in project-related activities such as farming vegetables, how will the project find out whether the proposed technical innovations are acceptable to them? What provisions are made for local women and men's participation in selecting and testing technologies; in evaluating results? Do monitoring and reporting systems distinguish male and female participants?

Step 8: Anticipate likely changes in the roles and status of women. How will the project affect women's access to and control over land, labor, capital, and expertise? Will women's workload increase or decrease? What will happen to their independent income, to their control of crops and the income from their sale, and to their voice in household decision-making on expenditures and other issues?

Step 9: Link changes in the roles and status of women with the expected project impact. How will changes in women's access and control of land and productive resources affect food availability? How will changes in women's ability to earn an independent income affect household cash flow? How will it affect their ability to provide for their families? How will women's workload affect such things as child care and family nutrition?

Step 10: Identify needed adaptations. Using the previous steps as a guide, specify what changes are needed in institutions, delivery systems, technical packages, and feedback mechanisms to overcome the barriers to women's access to project inputs and their ability and incentive to participate.

4.4 From Gender Analysis to Adaptations in Project Design and Implementation

The results of the evaluation show clearly that analysis of gender differences alone has little effect on project outcomes unless institutional and other barriers to participation are identified and overcome. This section examines a variety of adaptations that can be useful in removing barriers affecting women's access to project resources, participation in activities, and the distribution of benefits.

4.4.1 Women-Only, Women's Component, and Integrated Approaches

One way of overcoming barriers to women's access to development assistance is to design a women's project. Another alternative is to insert a component for women in mainstream projects. A third alternative is to integrate women throughout mainstream projects without a component for women. Since the Percy Amendment, A.I.D. has learned a great deal about the advantages and disadvantages of each approach, and each is discussed in detail below.

Women-only projects are designed exclusively for women participants and beneficiaries. Those examined by the evaluation ranged from institutional-development projects aimed at training staff of women's bureaus to community-based income-generating schemes. The main advantage of women-only projects is that they are highly visible efforts to explicitly improve the social and economic well-being of women. The main disadvantage is that their development impact, with few exceptions, tends to be minimal. Some of the reasons for low impact are institutional: tiny budgets, low government priority, and lack of leverage (especially when projects are located in under-funded social welfare ministries or private voluntary organizations). Other reasons are technical: women-only projects are often administered by people with inappropriate technical skills, their design is management-intensive, and their backstopping tends to be disproportionately costly in staff time.

Findings from the desk review indicate that the most successful women-only projects were located in mainstream institutions--ministries of agriculture (10), labor (49), and education (57) or credit banks (26)--rather than in women's bureaus or private voluntary organizations (17, 55, 85, 86). Impact was greatest in Malawi and Morocco, where women-only projects successfully reoriented mainstream institutions to make them more responsive to women's needs. In general, women-only projects have been more successful in delivering training than in raising production or generating income. They can be an effective way of training women in nontraditional skills or training women-in-development personnel.

A women's component is a women-focused activity within a larger project. As part of a larger project, women's components have access to greater resources and are able to borrow technical expertise. Nevertheless, the budgets of these components tend to be smaller (usually no more than 5 percent of a project's total budget), and like women-only projects they have positive and negative features.

In Nepal (002) and Ecuador (27), women's components emphasized women's domestic roles and overlooked their economic roles. In Nepal, Mauritania (83), and the Eastern Caribbean (09), women's components were implemented somewhat in isolation from the rest of the project and lacked technical input. In the same three projects, women's components diverted attention from gender issues in the main project components. In Niger (82), the women's component was successful because of better integration with the rest of the project and a good balance between agriculture and home economics. Women's components can be an effective way of benefiting women in larger projects; alternatively, they can lead to tokenism.

An integrated project by A.I.D.'s definition is any mainstream project that "integrates" women without a women-only design or a women's component. Yet this definition is misleading: 83 percent of all projects in the sample would qualify as "integrated" projects regardless of actual female participation. In reality, 55 percent of the mainstream projects are "gender blind" (low levels of gender analysis coupled with lack of adaptation) and only 25 percent are "gender sensitive" (specific gender analysis coupled with adaptation); another 20 percent are somewhere in between (analysis without adaptation). Only the gender-sensitive approach is truly "integrated" in the sense that gender differences are dealt with systematically and design is adapted in the light of these differences. The evaluation shows that gender-sensitive design is correlated with achievement of objectives, while gender-blind design is correlated with failure to achieve objectives. Of the three project types, gender-sensitive mainstream projects appear to be the most effective way of promoting and utilizing women's contribution to socioeconomic development.

4.4.2 Targeting Resources to Women

Targeting is one approach to trying to ensure that some of the resources of integrated projects actually reach women. The basic strategy is to earmark a share of such project inputs as commodities, training, credit, and employment "for women." Another is to establish quotas for women's participation in project activities. The underlying premise is that such earmarking will make project management accountable for delivering resources to women.

Cloud's desk review in the agriculture sector found that there was a positive relationship between resources targeted to women, resources actually received by women, and achievement of project purposes. Yet in general, the evaluation revealed that earmarking resources for women alone may not affect project outcomes when technical and institutional constraints to female participation are not identified and removed. For example, if there were no women in the pool of eligible participants, funds earmarked for women could not be utilized. Thus, earmarking resources for women cannot be considered a substitute for gender-sensitive adaptations in projects as a whole.

Mainstream agricultural projects that earmarked a share of the budget for extension work with village women invariably channeled resources through a separate women's extension service (01, 12, 83, 82). This was sometimes counterproductive, because the women's extension services tended to focuse on domestic tasks rather than agricultural production. The emphasis on a women's extension program diverted attention from involving female farmers in agricultural extension per se.

None of the mainstream credit projects earmarked a share of the funds for women, but two mainstream agricultural projects were to have set up a special fund for women's income-generating activities (82, 83). Neither was established. Women benefited more from mainstream credit projects targeted generally to the poor (see Blumberg's ADEMI case study and Lycette's desk study) than they did from separate funds established by women-only projects and women's components. This suggests that in credit projects, adaptation of mainstream delivery systems may be a more fruitful strategy than earmarking separate funds for women.

There is also a need to distinguish between resources such as grassroots training and credit earmarked for village women and resources such as personnel slots, vehicles, and overseas training earmarked for female professionals. It is village women's actual receipt of project resources that is correlated with achievement of objectives.

4.5 Project Adaptation

It is possible to adapt mainstream projects to gender without designing a women-only project or a women's component or earmarking a share of the project budget. This can be done by adjusting such things as the focus of project activities and their location, timing, and support services. This section examines some of the gender-responsive design adaptations that can improve projects by improving their outreach to women.

4.5.1 Change in the Focus of Project Activities

To a large extent, women's participation in mainstream projects is influenced by the focus of project activities. Women's participation was higher in energy projects with cookstove components than in those without them; it was higher in water supply projects that provided training in health and hygiene than in those that did not. In general, it was higher in all those projects in which one or more components focused on activities typically performed by women, such as cooking, sewing, child care, nutrition, or home economics. Thus, one way of increasing women's participation in development projects has been to add on a small component focused on women's household and family roles. The shortcomings of this approach have already been mentioned: they can divert attention from women's economic roles and their implications for the success of the project's main components.

Cloud's desk review in agriculture shows that women's participation is influenced by the relative importance given to "women's crops" versus "men's crops." Lycette's desk review on employment reveals that women's participation in credit projects is influenced by the relative emphasis on informal sector microentrepreneurs. However, the experience of the village livestock project in Burkina Faso (84), the seed multiplication project in Cameroon (78), and the agriculture project in Thailand (98) shows that focus on a "women's crop" or activity, in itself, is no guarantee that women will actually participate. When the focus is on a directly productive activity rather than on a domestic activity, involvement of women is not automatic and special efforts are needed to ensure their participation.

4.5.2 Change in the Number of Women in the Pool of Eligible Participants

In several cases, active efforts to increase women's participation in projects were frustrated because of the relatively low number of women in the pool of eligible persons from which project participants were drawn (53, 70, 01). This was especially true for institution-building projects, whose participants were drawn from the staff of government ministries. In a few other cases, the opposite happened: although no effort was made to include women, their participation was fairly high because a substantial number of women were already in the pool of eligible participants in a population targeted for other reasons.

In Botswana (04) and Thailand (95), professional women's participation in agricultural planning projects was fairly high because 30-40 percent of the staff in the planning unit from which participants were selected were women. The high participation of women in an English language training project in Syria (61) was not due to special efforts to recruit women but to the high proportion of women among eligible persons. The differences among countries reflect differences in women's access to higher education and the openness of government bureaucracies to their recruitment.

Although in such cases it might appear that women's participation is outside the control of project planners, this is rarely true. When there are few women in the pool of eligible people, three adaptations are possible: (1) eligibility criteria or institutional procedures can be changed so that women qualify, (2) special programs can be launched to train more women up to standards, or (3) male staff can be trained to work with village women in the absence of female staff.

4.5.3 Adaptation of Credit Components

Projects with credit components offered some of the clearest illustrations of problems and adaptations related to eligibility. Whether in agriculture, nonfarm production, or urban informal sector enterprises, the main determinants of women's participation in credit components were as follows:

- -- The focus of lending (microenterprises versus larger firms and male- versus female-dominated sectors)
- -- Minimum size of loans (the smaller the minimum, the higher the female participation rate)
- -- Collateral requirements (group liability can remove the obstacle of women's lack of land title and fixed assets)
- -- The hidden costs of borrowing (reducing the cost in time and money of trips to credit outlets for application and repayment increases participation)
- -- Bank's incentive to service small loans (innovations such as group lending can increase outreach to women by reducing overhead costs to the bank)

When the terms of lending are conducive, women will constitute a high proportion of loan recipients. When lending terms are adverse, few women will receive loans, regardless of efforts to target them. Thus analysis and adaptation of eligibility criteria and delivery systems are the key to increasing women's participation in credit programs and the productive activities that those programs support.

4.5.4 Outreach of Existing Delivery Systems

The outreach of existing delivery systems strongly affects projects' ability to reach and benefit women. A few of the mainstream projects with the best gender analysis had limited success in transferring technology to women because of weakness in delivery systems (83, 64, 01). In some geographic areas, where existing delivery systems already had contact with women, projects were successful in transferring technology to women in spite of weak gender analysis (16, 80). A social forestry project in India (70), a resource conservation project in Honduras (64), and a village development project in Tanzania (01) all reported limited uptake in districts not covered by existing women's extension programs. When ceilings on government expenditure make it difficult for the project to recruit additional staff to work with women, the programs' outreach depends on their ability to utilize whatever village-level staff (male or female) is already in the area.

4.5.5 Location of Project Activities and Services

The location of training facilities influenced women's participation in training of all types: because of their family responsibilities, women were less likely to participate in out-of-country than in-country training and were more likely to prefer day training to residential training (see Anderson).

In Kenya (001), project staff discovered that women's participation was much higher when user committee meetings were held directly at the water source. When meetings were held in the village, men dominated the discussion and the primary water users--women--remained on the sidelines.

4.5.6 Timing and Duration of Activities

Because women's time constraints differ from those of men, the timing and duration of project activities affect women's participation differently from men's.

-- In Niger (82), wives were unable to participate fully in farmer training courses because the timing of part of the program conflicted with meal preparation responsibilities; grain mills were introduced to reduce meal preparation time so that women could attend (see Cloud).

-- In Bolivia and Ecuador (21), sensitivity to women's time constraints was a key factor explaining the success of some income-generating projects and the failure of others (see Flora).

-- Adaptation of the Arid and Semi-Arid Lands project in Kenya (001) to women's seasonal time constraints was crucial in securing women's participation in soil and water conservation activities (see Carloni and Horenstein).

4.5.7 Facilities for Sleeping and Child Care

When training requires women's absence from home for extended periods, the availability of facilities for sleeping and child care greatly influences women's ability to participate. At the Botswana Agricultural College (54), construction of a women's dormitory facilitated the expansion of female enrollment (see Anderson and McBreen). In Nepal, where the planned women's dormitory at the Institute of Agriculture and Animal Science (90) was cancelled for lack of funds, only four women were able to enroll (see Cloud). At the Institute of Renewable Natural Resources in the same country (002), the construction of a separate dormitory, with a resident female warden and a guard, successfully overcame parents' reluctance to send daughters for forestry training (see Davenport, Nickell, and Pradhan). In Mali (56), child care facilities facilitated women's participation in residential training; in Kenya (001) lack of child care facilities hindered it.

4.5.8 Choice of Language and Communication Network

Finally, the choice of language and communication network also influences outreach to women. Because of their greater contact with the world beyond the village, men are more likely than women to speak the national language. In highland communities in Bolivia, Ecuador, and Guatemala, where men speak Spanish but women are monolingual in their indigenous dialect, Spanish-speaking extension workers could only talk to male farmers. The solution is to recruit bilingual extension agents directly in the local area. Communication networks among village women also differ from those of men. Outreach to women can be improved by identifying the times and places where different groups of women get together and then using these settings as entry points.

4.6 Conclusions

Evaluation findings show that the effort spent on improving gender analysis has paid off: it has benefited women, and it has made development assistance more effective. In the future, the payoff could be much greater if two conditions are met: institutional barriers to women's participation and benefit need to be analyzed, and projects need to be adapted to overcome barriers. While women-only projects and women's components can be useful in specific contexts, they are not the only alternatives. Adaptation of gender-sensitive mainstream projects appears to be a very successful way of promoting and utilizing women's contribution to development.

APPENDIX A

FINDINGS[1]

Using information from the desk review, the relationships between the variables outlined in the conceptual framework were examined for three types of projects: women-only projects, projects with a women's component, and mainstream projects. At a later stage, a further distinction was made between mainstream projects having direct contact with people at grassroots level (referred to as "direct service" projects) and those having no grassroots contact (referred to as "institutional development" projects). This appendix presents the results of the analysis of each of the variables in the conceptual framework for all three project types.

1. GENDER ANALYSIS

Between 1972 and 1984, the quality of gender analysis in A.I.D. project design documents steadily improved. However, even in the 1980-1984 period, less than 30 percent of the sample projects for which design documents were available (89 out of 98) identified the gender of the intended beneficiaries with any specificity (see Table A-1).

Table A-1. Level of Gender Analysis in
Project Design Documents, 1972-1977 to 1980-1984
(n = 89 projects with information)

Period	Level of Gender Analysis	No.	%
1972-1977	No information/mention of women	18	64.3
	Boilerplate	3	10.7
	Specific analysis	7	25
	Total 1972-1977	28	100.0
1978-1979	No information/mention of women	13	38.2
	Boilerplate	14	41.2
	Specific analysis	7	20.6
	Total 1978-1979	34	100.0
1980-1984	No information/mention of women	11	40.7
	Boilerplate	8	29.6
	Specific analysis	8	29.6
	Total 1980-1984	27	100.0

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[1] Readers should consult Appendix B for an explanation of the values assigned to the relationships among the variables in the conceptual framework.

Reference to women's directly productive roles has been more frequent than reference to their household and family roles, but less than a third of the projects analyze either in any detail (see Table A-2). After 1980, there was a sharp reduction in the number of projects that overlooked women and a corresponding increase in boilerplate references to their role in production and reproduction. More projects refer to women's productive roles but fewer projects analyze that role with any specificity.

Table A-2. Reference in Project Design Documents to Women's Directly Productive Roles and to Their Household/Family Roles, 1972-1977 to 1980-1984 (n = 91 projects with information)

Date/Level of Analysis	Directly Productive Roles		Household/Family Roles	
	No.	%	No.	%
1972-1977 (n=29)				
No Mention	15	51.7	17	58.6
Boilerplate	6	20.7	8	27.6
Specific Analysis	8	27.6	4	13.8
1978-1979 (n=35)				
No Mention	10	28.6	17	48.5
Boilerplate	10	28.6	9	25.7
Specific Analysis	15	42.6	9	25.7
1980-1984 (n=27)				
No Mention	7	25.9	9	33.3
Boilerplate	12	44.4	11	40.8
Specific Analysis	8	29.6	7	25.9

The aspect of women's directly productive roles that has received the most attention is the gender division of labor (mentioned by 45 percent of the projects with design documents and specifically analyzed by 27 percent). Gender differences in access to and control of resources were mentioned by 31 percent, but only 22 percent analyzed them with any degree of specificity.

More design documents emphasized how women could benefit from the project. Only a few emphasized that the project could also benefit from women's participation (see Table A-3).

Table A-3. Project Design Document References to Project Benefits to Women or Women Benefiting the Project, 1972-1977 to 1980-1984
(n = 91 projects with information)

Date/ (No. of Projects)	Women Benefit Project		Project Benefits Women	
	No.	%	No.	%
1972-1977 (n=29)	5	17.2	12	41.4
1978-1979 (n=35)	9	25.7	17	48.6
1980-1984 (n=27)	9	33.3	21	77.8
Total (n=91)	23	25.3	50	54.9

1.1 Mainstream Direct-Service Projects

The study analyzed the relationship between gender analysis and each of the variables in the conceptual framework--the baseline situation, gender analysis, project adaptation, participation, achievement of purposes, impact on women, and achievement of goals. A moderate relationship was found between the quality of gender analysis and adaptation, in the following sense: if gender roles were not analyzed or if the analysis was only superficial, no project adaptation occurred; if gender roles were analyzed, some projects were adapted to increase women's participation or benefit and others were not (see Table A-4).

Table A-4. Relationship Between Gender Analysis and Project Adaptation: Mainstream Direct-Service Projects in All Sectors
(n = 37 projects with information)

Level of Gender Analysis	Level of Project Adaptation		
	Low (n=27)	Medium (n=5)	High (n=5)
Low (n=20)	19	1	0
Medium (n=9)	5	2	2
High (n=8)	3	2	3

The relationship between gender analysis and women's actual level of participation was weaker, but the relationship was in the same direction. Failure to analyze gender roles was strongly associated with exclusion of women, but analysis of gender roles was only weakly correlated with women's participation. This finding supports the conceptual framework's hypothesis that gender analysis would improve participation only when institutional barriers were identified and removed.

No direct relationship was found between gender analysis and achievement of project purposes, except in cases where recognition of gender differences led to project adaptation and greater female participation. In the absence of adaptation and participation, gender analysis had no effect on the achievement of purposes. For the same reason, there was no direct relationship between gender analysis and projects' impact on women.

1.2 Mainstream Institutional-Development Projects

Few mainstream institutional-development projects adapted technical messages or delivery systems in response to gender differences. For this reason, lack of gender analysis was correlated with lack of adaptation, but there was little evidence that at higher levels of gender analysis adaptation occurred more frequently. No relationship was found between gender analysis and levels of female participation. Likewise, no relationship was found between gender analysis and achievement of project purposes. Moreover, projects that lacked analysis of gender differences tended to have a negative impact on women, but projects that did analyze gender differences did not necessarily have a positive impact on women.

1.3 Women-Only Projects

The overall level of gender analysis was higher for women-only projects, and a positive relationship was found between the quality of analysis and project adaptation. Good gender analysis was also correlated with (1) higher levels of participation (i.e., more effective outreach to large numbers of women), (2) achievement of project purposes, and (3) a positive impact on women. Superficial gender analysis was correlated with lower levels of participation (often a sign of lack of interest in what the project offered), failure to achieve purposes, and a corresponding failure to have much impact on women.

1.4 Women's Components

No conclusions can be drawn because of the small number of cases, but the quality of gender analysis appears to have little relationship with the implementation of women's components. In one case with gender analysis, the women's component was never implemented. In another case, the analysis was among the best, but the woman selected to implement the component had no qualifications. The Caribbean Regional Agricultural Extension project (09), which was the subject of one of the 10 case studies (see Schminck and Goddard), also had high-quality gender analysis. However, because the project's main thrust is institutional development, its impact at the farm level is still very limited, and it is thus premature to judge the impact of the gender analysis on project beneficiaries.

2. PROJECT ADAPTATION

2.1 Mainstream Direct-Service Projects

The analysis revealed that project adaptation is a key variable in the conceptual framework. There is a strong positive correlation between project adaptation and women's actual level of participation. Little or no adaptation to gender is associated with low levels of participation, whereas explicit adaptation to gender significantly improves women's participation (see Table A-5).

Table A-5. Relationship Between Project Adaptation and Women's Participation: Mainstream Direct-Service Projects in All Sectors
(n = 26 projects with information)

Level of Adaptation	Level of Women's Participation		
	Low (n=9)	Medium (n=9)	High (n=8)
Low (n=16)	9	5	2
Medium (n=5)	0	4	1
High (n=5)	0	0	5

Even more important, the level of project adaptation shows a positive correlation with the achievement of project purposes (see Table A-6). Projects that adapted institutions, delivery systems, and technical packages to deal with gender differences were more likely to achieve their stated purposes (34, 41, 70, 72, 80) than projects that made no adjustment to deal with gender differences (03, 07, 13, 28, 37, 38, 71, 73, 87, 88, 94, 98).

Table A-6. Relationship Between Project Adaptation and Achievement of Project Purposes: Mainstream Direct-Service Projects in All Sectors
(n = 36 projects with information)

Level of Adaptation	Achievement of Objectives		
	Low (n=13)	Medium (n=9)	High (n=14)
Low (n=26)	12	7	7
Medium (n=5)	1	2	2
High (n=5)	0	0	5

Seven projects failed to fit the predicted pattern (i.e., they were highly successful in achieving their purposes in spite of a lack of adaptation). Five of these were concerned with constructing water supply and sanitation systems; a sixth was concerned with delivery of education technology such as computers and software (66). Since their purposes could be achieved without much contact with villagers, these cases do not contradict the hypothesis. Such projects share more in common with institutional-development projects than with direct-service projects. The seventh project that failed to fit the predicted pattern was a small farmer credit project (76). (It is discussed in detail in Section 2.1.1 of the main body of the paper.)

The relationship between project adaptation and impact on women was weaker: lack of adaptation was associated with a limited or negative impact on women, but adaptation, by itself, did not always lead to a positive impact on women (see Table A-7). This finding was expected.

Table A-7. Relationship Between Project Adaptation and Impact on Women: Mainstream Direct-Service Projects in All Sections
(n = 27 projects with information)

Level of Adaptation	Impact on Women		
	Low/Negative (n=14)	Mixed (n=7)	Positive (n=6)
Low (n=18)	13	2	3
Medium (n=5)	1	3	1
High (n=4)	0	2	2

2.2 Mainstream Institutional-Development Projects

The overall level of project adaptation was very low. As a consequence, no relationship was found between adaptation and women's actual level of participation. There was no correlation between adaptation and achievement of project purposes. Nor was there any relationship between project adaptation and impact on women.

2.3 Women-Only Projects

In spite of the fact that the participants in women-only projects are all female, the quality of the gender adaptation in these projects varied. Those projects with good adaptation performed better in every way: they reached more women; they were more likely to achieve their purposes; and they were more likely to have a positive impact on women.

3. PARTICIPATION

3.1 Mainstream Direct-Service Projects

Table A-8 reports the most important finding of the study, namely, that for mainstream direct-service projects in all five sectors, the degree of match between gender roles in the baseline situation and the gender of project participants shows a strong positive correlation with achievement of project purposes. In other words mainstream projects that reach women and ensure substantial participation are more likely to achieve their purposes; projects that bypass women or ensure only token participation are less likely to achieve their stated purposes. Outreach to women can be a crucial factor in project success. It effects efficiency in addition to equity. (Section 2 of the main body of this paper examines this important finding in greater detail.)

Table A-8. Relationship Between Level of Female Participation and Achievement of Project Purposes: Mainstream Direct-Service Projects in All Sectors
(n = 28 projects with information)

Level of Female Participation	Achievement of Project Purpose Low (n=9)	Medium (n=6)	High (n=13)
Low (n=9)	5	4	0
Medium (n=8)	4	2	2
High (n=11)	0	0	11

Table A-9 reports another important finding: the level of female participation also shows a positive correlation with achievement of project socioeconomic goals. In other words, projects that reached women and ensured substantial participation were more likely to have the desired impact on broader socioeconomic goals (15, 47, 77, 80, 89); projects that failed to reach women and ensure their participation were less likely to achieve these broader goals (13, 28, 37). (This important finding is explored in Section 3 of the paper.)

There were no major anomalies in the pattern: not even one project that was known to have low levels of female participation was highly successful in achieving its goals; only three projects were moderately successful in achieving their goals in spite of women's lack of participation: two were concerned with physical construction of buildings and irrigation systems on large-scale settlement schemes (91, 93) and the other with seed multiplication (78). In two of these cases (78, 91), there is evidence that higher levels of female participation would have improved achievement of goals.

Table A-9. Relationship Between Level of Female Participation and Achievement of Project Goals: Mainstream Direct-Service Projects in All Sectors (n = 18 projects with information)

Level of Female Participation	Achievement of Goals		
	Low (n=6)	Medium (n=5)	High (n=7)
Low (n=6)	3	3	0
Medium (n=5)	3	0	2
High (n=7)	0	2	5

3.2 Institutional-Development Projects

There was no correlation between women's level of participation and achievement of either immediate project purposes or long-range goals.

3.3 Women-Only Projects

In spite of the fact that nearly all beneficiaries are women, the correlation between participation and achievement of project purposes is moderately positive: the more women reached by a project and the greater their decision-making role, the higher the likelihood of achieving the project purposes. However, in spite of the positive relationship between participation and achievement of immediate project purposes, for women-only projects there was little correlation between female participation and achievement of long-term goals. The reason seems to be that many women-only projects that achieved their immediate purpose of training women or launching community development activities have by their nature had a limited impact on broader socioeconomic goals.

4. ACHIEVEMENT OF PROJECT PURPOSES

4.1 Mainstream Direct-Service Projects

It was expected that, other things being equal, projects that achieved their immediate purposes would be more likely to have a positive impact on women than projects that failed to achieve their stated purposes. Table A-10 shows that although the relationship is in the expected direction, achievement of project purposes in itself is not sufficient to ensure a positive impact on women.

Table A-10. Relationship Between the Achievement of Project Purposes and Projects' Impact on Women: Mainstream Direct-Service Projects in All Sectors (n = 30 projects with information)

Achievement of Purposes	Impact on Women		
	Low/Negative (n=14)	Mixed (n=8)	Positive (n=8)
Low (n=10)	8	2	0
Medium (n=7)	5	1	1
High (n=13)	1	5	7

4.2 Mainstream Institutional-Development Projects

There was no correlation between achievement of project objectives and impact on women. Evaluation teams assessed project performance on other grounds. Impact on women was not even considered.

4.3 Women-Only Projects

The correlation between achievement of project purposes and impact on women was positive and nearly perfect (see Table A-11). This was expected because women-only projects are designed to improve women's well-being.

Table A-11. Relationship Between Achievement of Project Purposes and Impact on Women: Women-Only Projects in All Sectors (n = 10 projects with information)

Achievement of Objectives	Impact on Women		
	Low/Negative (n=3)	Mixed (n=2)	Positive (n=5)
Low (n=4)	3	1	0
Medium (n=0)	0	0	0
High (n=6)	0	1	5

5. ACHIEVEMENT OF SOCIOECONOMIC GOALS

5.1 Mainstream Direct-Service Projects

The study revealed that projects that failed to achieve their purposes almost never achieved their goals but that projects that achieved their purposes were not necessarily more successful in achieving long-range goals. To shed light on why projects that achieve their immediate purposes might fail to have the desired socioeconomic impact, we looked at projects' impact on women as an intervening variable. The findings suggest that gender variables could be of major importance in explaining projects' socioeconomic impact.

The relationship between achievement of immediate project purposes and achievement of goals is neither direct nor automatic. However, projects that achieve their purposes and have a positive impact on women are much more likely to achieve socioeconomic goals than projects that achieve their purposes but have a low or negative impact on women (see Table A-12). What is more, the correlation between impact on women and achievement of goals is stronger than the correlation between achievement of project purposes and achievement of goals.

Table A-12. Relationship Between Projects' Impact on Women and Achievement of Socioeconomic Goals: Mainstream Direct-Service Projects in All Sectors (n = 21 projects with information)

Impact on Women	Achievement of Goals		
	Low (n=7)	Medium (n=6)	High (n=8)
Low/Negative (n=10)	6	3	1
Mixed (n=5)	1	1	3
Positive (n=6)	0	2	4

Six projects that had a low or negative impact on women failed to achieve their goals. In two cases, the connection between gender variables and failure to achieve goals was clear. One was a water supply project that developed water sources so far away from where people lived that there was no reduction in women's workload (37). The other was a livestock project that initially targeted resources for women's activities exclusively to men (84). (The livestock project is discussed in detail in Section 2.1.1 of the paper.) In the other four projects, there was not enough information to determine whether the project's negative impact on women was a primary cause of failure to achieve its goals or merely a contributing factor.

Four of the projects that had a positive impact on women achieved their goals, but there is only one case with sufficient information to show a direct link between the project's impact on women and achievement of goals. This was a watershed management project in Cape Verde (80), where completion and maintenance of soil conservation works depended on female labor. In spite of gaps in documentation, the findings from the desk review are strongly supported by evidence from the case studies. (These findings are reported in Section 3 of this paper.)

The one project that was highly successful in achieving its goals in spite of a neutral to negative impact on women was the education technology project mentioned earlier (66); it was successful in its own terms, but failed to reduce the low school enrollment of girls. The team that evaluated the project as highly successful in achieving its stated goals did not consider the project's impact on school enrollment of girls, despite A.I.D.'s explicit policy to reduce sex disparities in enrollment.

5.2 Mainstream Institutional-Development Projects

The relation between projects' impact on women and achievement of goals is less clear for institutional-development projects than for direct-service projects. Four projects that had a low or negative impact on women failed to achieve their goals (02, 60, 79, 90). However, in each of these cases other factors were more important in explaining the failure than the project's impact on women.

One project was rated highly successful in achieving its goals in spite of a negative impact on women. It was a project concerned with rebuilding primary schools after a hurricane (62); like the education technology project cited above, it was successful in technical (i.e., school construction) terms, but failed to improve girls' school attendance. In this case, the location of the schools had an adverse effect on girls' attendance because many girls' families oppose their traveling long distances from home. The case illustrates the need for bringing evaluation criteria in line with A.I.D. policy.

5.3 Women-Only Projects

A moderately positive correlation was found between projects' impact on women and achievement of goals. Given the fact that a positive impact on women was almost synonymous with achievement of the projects' goals, this was expected.

6. CONCLUSIONS

Recognition of gender differences is important for equity, but it is equally important for project efficiency. It is at least as important for mainstream projects as it is for women-only projects and for women's components of projects.

6.1 Mainstream Direct-Service Projects

Projects that deliver goods and services directly to people at grassroots level are more likely to achieve their purposes when the gender of project participants reflects the division of economic responsibilities in the baseline situation.

Failure to analyze gender differences is associated with lack of project adaptation. Lack of adaptation is associated with low levels of female participation. Low levels of female participation show a strong correlation with failure to achieve project purposes. The consequence of inadequate gender analysis, lack of project adaptation, and low levels of female participation is failure to achieve project purposes and broader development goals.

Recognition of gender differences is only the first step. It increases the probability that projects will be adapted to increase female participation, but by itself it is not enough. Project adaptation emerges as a key variable. Without adaptation, gender analysis has little or no effect on project outcomes.

High levels of female participation show a strong positive correlation with achievement of project purposes. Levels of participation are strongly influenced by project adaptation. These findings explain why project adaptation is correlated with achievement of objectives.

In short, projects that recognize gender differences, adapt delivery systems accordingly, and ensure substantial female participation are more efficient and are more likely to achieve their purposes. They are also more likely to achieve broader socioeconomic goals. This holds true for mainstream direct-service projects in all five sectors--agriculture, education, employment/income generation, energy/natural resouce conservation, and water supply/sanitation.

6.2 Manstream Institutional-Development Projects

The fundamental difference between institutional-development projects and direct-service projects is that the former do not directly reach people at grassroots level. For this reason, the gender division of labor and responsibilities in the baseline situation is not as important for the projects' achievement of their immediate purposes. This explains the lack of correlation between the level of female participation and achievement of project purposes.

The number of mainstream insititutional-development projects that adapted design in response to gender analysis was too small to draw any conclusions about the relationship between project adaptation and female participation. Gender analysis without adaptation has no effect on project outcomes.

No conclusions could be drawn about the importance of gender variables for achievement of socioeconomic goals because of the small number of cases with information (12) and the large number of projects that failed to achieve their goals (9).

6.3 Women-Only Projects and Women's Components

The conceptual framework is also supported by women-only projects. A positive relationship was found between the quality of gender analysis and project adaptation. Projects with good adaptation performed better in every way: they reached more women; they were more likely to achieve their objectives; and they were more likely to have a positive impact on women.

No conclusions could be drawn about women's components because of the small number of projects with information. The findings did not seem to fit any particular pattern.

APPENDIX B

METHODOLOGY

This study is one of the Center for Development Information and Evaluation (CDIE) efforts to help the Agency learn from its experience. The primary objective of the study was to synthesize Agency experience in the field of women in development in light of the 1982 Policy Paper emphasis on the importance of gender to project efficiency. Unlike previous CDIE studies that focus on particular sectors, this study examines issues of women in development in five sectors--agriculture, education, energy, employment/income generation, and water/sanitation.

This study was organized in three phases: (1) sectoral desk reviews of project documents, (2) project field studies, and (3) synthesis of findings from the two earlier phases. Each study phase is briefly described below.

1. DESK REVIEWS

One objective of the desk reviews was to assess Agency experience since the beginning of its women in development program in 1973. A second objective was to use available project documentation to assess project implementation in light of the major assertion of the 1982 Women in Development Policy Paper: that gender is a key variable for the efficient achievement of objectives in mainstream projects.

Ninety-eight projects were randomly selected for the desk review from the approximately 4,000 on-going and completed projects contained in the CDIE automated project data base. The sampling procedure consisted of (1) identifying projects that had "women", "female," or equivalent descriptors in the abstracts of project documents; (2) reviewing this list of projects with the Office of Women in Development and regional bureau Women in Development Officers; (3) assigning random members to the final list of 416 projects; and (4) sampling projects for each sector. The number of projects for four of the sectors was determined by the number of projects each consultant could review for this study. The energy sector was the exception, because all 10 projects that appeared in the list of 416 projects were sampled. Table B-1 shows the distribution of projects by sector.

Table B-1. Number of Projects in Total Listing and in Sample, by Sector

Sector	Listing		Sample		Ratio
	No.	%	No.	%	
Agriculture	181	43.5	40	40.8	.22099
Education	105	25.2	19	19.4	.18095
Employment	58	13.9	11	11.2	.18965
Energy	10	2.4	10	10.2	1.0
Water/Sanitation	62	14.9	18	18.2	.29032
Total	416	100	98	100	.23558

The project sample is not representative of all A.I.D. projects but rather of those that had a gender descriptor in the CDIE project data base. The assumption that a gender descriptor in project abstracts reflects greater emphasis on gender issues was not supported by the review of project documents. Thus, while the sample may overemphasize the importance of gender for some A.I.D. projects, a bias toward a more favorable assessment of women-in-development policy implementation is unlikely.

Table B-2 shows the distribution of projects sampled by sector and type of project (women-only, women's component, or integrated project). Eighty-two percent of the total number of projects are mainstream projects that aimed at working with both men and women, as opposed to projects with components specifically designed for women or projects that are designed exclusively for women.

The largest number of projects sampled were from African (40) and Latin American (LAC) countries (32); 14 projects were sampled in Asia and 12 in the Near East (NE) region. The regional distribution of projects sampled is similar to the pattern for all projects Agencywide (see Table B-3).

Table B-2. Number and Percentage of Projects by Type of Project and Sector

	Type of Project						
	Women-Only		Women's Component		Integrated		
Sector	No.	%	No.	%	No.	%	Total
Agriculture	5	41.7	3	50.0	32	40.0	40
Education	5	41.7	2	33.3	12	15.0	19
Employment	2	16.7	1	16.7	8	10.0	11
Energy	0	0	0	0	10	12.5	10
Water/Sanitation	0	0	0	0	18	22.5	18
Total	12	100	6	100	80	100	98

Table B-3. Number of Projects Sampled by Region and by Sector

	Africa		Asia		LAC		NE		
Sector	No.	%	No.	%	No.	%	No.	%	Total
Agriculture	19	47.5	7	50.0	11	34.4	3	25.0	40
Education	7	17.5	2	14.2	5	15.6	5	41.7	19
Employment	3	7.5	1	7.1	7	21.9	0	0	11
Energy	5	12.5	4	28.6	1	3.1	0	0	10
Water/Sanitation	6	15.0	0	0	8	25.0	4	33.3	18
Total	40	100	14	100	32	100	12	100	98

Desk reviews for projects in the five sectors were conducted by consultants experienced in their respective sectors and with A.I.D. projects and processes. Two consultants carried out the desk reviews for the agriculture sector and one consultant for each of the other sectors. Agriculture projects were subdivided according to region: one consultant reviewed projects from Asia, North Africa, the Sahel, and the Middle East; the other reviewed projects from Latin America, the Pacific Islands, and Sub-Saharan Africa.

Of the 98 projects in the sample, 37 were completed and 61 were on-going at the time of the study (see Table B-4). The documents available for each project varied considerably by phase of the project and by sector. Documentation was most readily available for the design phase. Information on the implementation phase was lacking for about one-third of the projects, and evaluation information was available for only 40 projects (see Table B-5).

Table B-4. Project Completion Status by Sector

Sector	Active		Completed		Total
	No.	%	No.	%	
Agriculture	27	44.3	13	35.1	40
Education	10	16.4	9	24.3	19
Employment	4	6.6	7	18.9	11
Energy	9	14.7	1	2.7	10
Water/Sanitation	11	18.0	7	18.9	18
Total	61	100	37	100	98

Table B-5. Documentation Available by Project Phase and Sector for All Sampled Projects

Sector	Design		Implementation		Evaluation	
	Yes	No	Yes	No	Yes	No
Agriculture	36	4	23	17	13	27
Education	18	1	13	6	14	5
Employment	11	0	9	2	5	6
Energy	10	0	7	3	5	5
Water/Sanitation	17	1	9	9	3	15
Total	92	6	61	37	40	58

Consultants used a common questionnarie to code information found in the documentation for each project. Some problems were encountered at this stage because of the complexity of the questionnaire and the limited information available in project documents. To fill the gaps in the documentation, consultants relied on their own first-hand knowledge of the projects and on interviews with project officers. The list of projects included in the desk review is in Appendix C.

Because the results of the desk reviews did not provide enough information to assess the importance of gender to project efficiency, a field study phase was planned and carried out during 1985. This study phase is described in the following section.

2. FIELD STUDY PHASE

The objective of this phase of the study was to gain better understanding of the relationship between gender and the achievement of project objectives and greater insight into the relationship between gender issues and socioeconomic development.

As desk reviews were completed, findings were examined by project officers in CDIE. Consultants recommended projects for inclusion in the field study phase, as did central and regional bureau Women in Development Officers. An initial list of 23 projects was compiled, and USAID Missions were asked to approve fieldwork on the projects, which would be conducted for 2 weeks between March and May 1985. Eleven Missions agreed to this request. Only one of these projects was not chosen for fieldwork because of its delayed implementation. All projects selected for fieldwork had either been completed or were at least in their second year of implementation.

Six of these ten projects had been examined during the desk review; others, which had been eliminated at random from the desk review, were selected because they were mainstream projects in which women's participation was considered particularly important. The projects represented 11 countries or subregions distributed within four regions. Table B-6 presents summary information on the 10 projects selected for field study.

Fieldwork was conducted during April, May, and June of 1985. In all, 16 consultants participated in the field study phase. In-country professionals were added to the study team for some projects.

Table B-6. Summary Information on the Ten Projects Selected for Field Study

Project Number	Project Name	Country	Year Start End	Funding (in $US millions)	Status	Project Purpose	Comments
3670132	Resource Conservation and Utilization	Nepal	1980-1985	A.I.D.: 27.5 Gov't of Nepal: 5.0	Delayed Implementation	To assist the Government of Nepal in the protection and restoration of the soil, water, and plant resource base upon which the rural population is totally dependent.	Women's components
3830056*	Mahaweli Ganga Design and Supervision	Sri Lanka	1980-1986	A.I.D.: 10.0 (loan)	Ongoing	To design a well-constructed irrigation network to serve 37,400 hectares of irrigated farmland in System B of the Accelerated Mahaweli Program. To mitigate the negative environmental effects of the Accelerated Mahaweli Program.	Integrated loan/ multidonor settlement
3830073*	Mahaweli Basin Development Phase II	Sri Lanka	1981-1986	A.I.D.: 9.8 (loan: 9.5) (grant: 0.3)	Ongoing	To develop the area of System B of the Accelerated Mahaweli Program along the left bank of the Madura Oya River.	Integrated loan/ multidonor settlement
3830078*	Mahaweli Sector Support	Sri Lanka	1981-1984	A.I.D.: 41.3 (grant)	Completed	To provide local-cost financing to assist the Sri Lankan Ministry of Finance and Planning's External Resources Department to maintain investment in the Mahaweli irrigation and rural development program in the period of budgetary stringency. The project will primarily finance "downstream projects" (i.e., roads, schools, community centers, on-farm irrigation) that increase production, employment, and power generation.	Integrated loan/ multidonor settlement

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Table B-6. Summary Information on the Ten Projects Selected for Field Study (cont.)

Project Number	Project Name	Country	Year Start End	Funding (in $US millions)	Status	Project Purpose	Comments
5380017*	Other West Indies-Eastern Caribbean Region: Caribbean Agricultural Extension I	Eastern Caribbean and Belize	1980-1983	A.I.D.: 6.9 (grant)	Completed	To increase the effectiveness of national extension systems within the nine territories served by this project.	Women's component
5380068*	Agricultural Extension II	Antigua Dominica Montserrat St. Kitts/Nevis St. Lucia St. Vincent Belize	1982-1986	A.I.D.: 5.9 (grant)	Ongoing	To implement plans developed in project 5380017 to upgrade agricultural extension systems in six Eastern Caribbean states as well as regional institutions supporting such systems.	Women's component
5960097*	ALCOSA Agribusiness Employment/Investment Promotion	Guatemala	1981-1984	A.I.D.: 6.0 Private Bank Borrowing: 6.0 Central America: 2.0 Subborrower Investment: 6.8	Completed	To expand private agribusiness investments in Central America, with the goal of improving the standard of living of the Central American poor. To stimulate economic and agricultural growth, create employment, and increase rural income.	
5960068*	LAAD						

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Table B-6. Summary Information on the Ten Projects Selected for Field Study (cont.)

Project Number	Project Name	Country	Year Start End	Funding (in $US millions)	Status	Project Purpose	Comments
4930308	Northeast Rainfed Agricultural Development	Thailand	1981-1988	(obligated) Thai Gov't: 5.7 A.I.D.: 10.0 (loan: 6.3) (grant: 3.7)	Delayed Implementation, expended (3/5/85): A.I.D.: 2.4 (loan: 1.0) (grant: 1.4)	To establish in eight representative tambons of Northeast Thailand a replicable agricultural development program for increasing farm productivity and farm incomes, particularly among lower income farmers in rainfed agricultural zones.	Integrated
5170208	Association for the Development of Microenterprises Program	Dominican Republic	1984-1986	A.I.D.: 0.5 (grant)	Ongoing	To provide loans and technical assistance through the Association for the Development of Microenterprises, Inc., to (1) individual microentrepreneurs and (2) groups of microentrepreneurs (solidarity groups) at the lowest level of the microentrepreneurial hierarchy (e.g., street sellers, home-based mini-workshop ventures).	Integrated
5980600	Appropriate Technology for Rural Women	Latin America Regional: Bolivia Ecuador	1979-1983	A.I.D.: .687	Phase 1 - Completed	To develop and test methodologies for community development that generate income and improve quality of life of rural women.	Women only; self-help income generation

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Table B-6. Summary Information on the Ten Projects Selected for Field Study (cont.)

Project Number	Project Name	Country	Year Start End	Funding (in $US millions)	Status	Project Purpose	Comments
6080147	Industrial and Commercial Job Training for Women	Morocco	1978-1984	A.I.D.: 3.2	Completed	To integrate women trainees into the Labor Ministry's industrial and commercial training centers. To prepare them with marketable skills and to assist them in job placement appropriate to their training.	Women only: grant training
6150172	Arid and Semi-Arid Lands Development	Kenya	1979-1986	A.I.D.: 13.0 Kenyan Gov't: 7.2	Ongoing	To establish a basis for launching an accelerated national development program in arid and semi-arid through (a) enhanced administrative, planning, and technical competence, and (b) testing and proving an array of activities in soil and water conservation and tillage methods. To preserve and improve the agricultural production base in the pilot area in Kitui District.	Integrated

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Table B-6. Summary Information on the Ten Projects Selected for Field Study (cont.)

Project Number	Project Name	Country	Year Start End	Funding (in $US millions)	Status	Project Purpose	Comments
6330074	Agricultural College	Botswana	1978-1986	A.I.D.: 8.4 Gov't of Botswana: 1.0	Ongoing	To establish within Botswana Agricultural College a largely localized training institution capable of serving rural sector needs, with the goal of improving the welfare of Botswana's small-scale farmers and herders.	Integrated training

*Each of these groups of projects was analyzed as one project.

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All team members participated in a training session before departure for the field, to discuss the general study questions and their specific project scope of work. Also, a general report outline to guide report preparation was distributed. Study team members used several variations of a rapid reconnaissance methodology ranging from semistructured questionnaires to unstructured individual, household, and group interviews. Field data analysis was complemented with secondary project data sources.

Interim reports were completed during July and August, and reports were revised and edited during early 1986 to increase the uniformity of presentation.

3. SYNTHESIS PHASE

The major objective of this study was to produce a synthesis of findings that would summarize the project experience of 10 years of implementation of A.I.D.'s Women in Development program. The analysis for this phase included data collected from the desk reviews and the field study phase. Two factors complicated the synthesis phase:

1. The newness of the state of the art in the field of women in development. Although the literature on women in development has grown considerably in recent years, much work remains to be accomplished, both at the theoretical level (refining terms, concepts, and hypotheses) and at the practical level (collecting data from projects that have economic development objectives). During the synthesis of the study results, considerable effort was spent clarifying concepts and developing a conceptual framework within which the data already collected could be analyzed. Thus, this synthesis represents a process of inductive theory building. This process was facilitated by the continuous informal exchange of ideas among the study participants and through several, more structured seminars organized for this purpose.

2. The intention to complete the synthesis document for the Nairobi Conference concluding the U.N. Decade for Women. In trying to meet a very tight schedule, work on the synthesis began before consultants had prepared their final versions of the field reports. Although in the long run this process strengthened the analysis for individual field reports, it also delayed the completion of the synthesis report because individual authors had to be consulted on the accuracy of interpretation. This interactive dialogue produced a very useful refinement of the concepts and of the theoretical framework used in the synthesis analysis.

The synthesis report includes both qualitative and quantitative information on projects. The sectoral desk reviews and the 10 field study reports provided the qualitative data. The quantitative information resulted from the processing of project data in a computerized data base.

The data base included the 98 projects originally sampled for the sectoral desk reviews. Project information included general characteristics (such as funding, length of project, completion status, sectoral activities, type of project, and achievement of project purposes and project goals) and more gender-specific project characteristics identified through the questionnarie coded by consultants for the sectoral desk reviews.

After the conceptual framework was refined into the model presented in the synthesis paper (Section 1.4), questionnaire items were recoded according to the seven major variables of this model, using all the information available from desk reviews and field reports. A description of the indicators used to measure each variable is presented below.

1. Gender analysis, defined for this study as the intersection between gender variables and project purposes and goals, was measured using the following questionnaire items:

a. Are females mentioned in design documents?

0. No answer
1. No
2. Yes, general boilerplate/very scanty
3. Yes, at least some specificity/discussion
4. Yes, more

b. Do design documents mention women's directly productive roles (subsistence/market)?

0. No answer
1. No
2. Yes, general boilerplate/very scanty
3. Yes, at least some specificity/discussion
4. Yes, more

c. Do design documents mention females' indirectly productive role (household/nonmarket/human capital formation)?

0. No answer
1. No
2. Yes, general boilerplate/very scanty
3. Yes, at least some specificity/discussion
4. Yes, more

(Note: Questions a, b, and c were also used to code information from implementation and evaluation documents.)

d. Is there any information on women's directly productive roles related to the project?

0. Not Applicable
1. No
2. Yes, general boilerplate/very scanty
3. Yes, at least some specificity/discussion
4. Yes, more

e. Is there any information on women's indirectly productive roles related to the project?

0. Not Applicable
1. No
2. Yes, general boilerplate/very scanty
3. Yes, at least some specificity/discussion
4. Yes, more

Responses to these questions were combined and classified into low, medium, and high ratings of gender analysis, as follows:

Rating	Question	Category Within Question
Low	a	1 or 2 (boilerplate)
	b	1 or 2 (no or boilerplate)
	c	1 or 2 (no or boilerplate)
	d	1 or 2 (no or boilerplate)
	e	1 or 2 (no or boilerplate)
Medium	a	3 (some)
	b	3 (some)
	c	3 (some)
High	a	4 (more specificity)
	b	4 (more specificity)
	c	3 or 4 (some or more)
	d	3 or 4 (some or more)

2. Adaptation. Questionnaire items did not reflect this concept. Adaptation within individual projects was therefore rated as low, medium, or high according to whether project components (i.e., implementing institutions, delivery systems, or technical packages) were designed or redesigned to improve women's participation in project activities.

For example, a training project in Nepal received a high rating because it built a dormitory for female participants. A water project in Tunisia received a low rating because women were not consulted about the location of the wells nor were they involved in the maintenance of the water system.

3. Participation. Following the conceptual framework, participation was defined in terms of three factors: presence of women in project activities, match between female participation in specific project activities and gender division of labor in the project area, and the importance of the activity for the project.

Four items in the questionnaire were related to women's participation in project activities:

a. Do the documents mention that women in the area are participating as active agents in implementation?

0. Not Applicable
1. No
2. Yes

b. Do the documents mention that women in the target area are participating in decision-making concerning the project?

0. Not Applicable
1. No
2. Yes

c. Are women receiving any resources earmarked for/targeted to them in the project design?

0. Not Applicable
1. No, they are not receiving any
2. Yes, but they are receiving less than the targeted amounts
3. Yes, they are receving approximately the amount targeted
4. Yes, they are receiving more than the amount targeted

d. Are any resources being delivered to/used by women that were not specifically targeted to them in project design?

0. Not Applicable
1. No
2. Yes

Based on responses to these questions, women's participation was rated as low, medium, or high, as follows:

Rating	Question	Category Within Question
Low	a b c d	1 (no) 1 (no) 1 (no) 1 (no)
Medium	a b c d	One of the four questions had a positive response.
High	a b c d	Two or more of the four questions had a positive response.

The rating of women's participation in project activities was supplemented by a qualitative assessment of the degree to which women's participation matched the gender division of labor in the project area and the importance to the project of the activity in which women participated.

4. Achievement of project objectives was measured by the responses to the following questions:

a. Do the implementation documents provide an overall assessment of how the general project is faring?

0. Not Applicable
1. No
2. Yes, and it is characterized as proceeding very well
3. Yes, and it is characterized as proceeding moderately well/mixed
4. Yes, and it is characterized as proceeding marginally/not well

b. Do the results[1] documents give an overall assessment of project effectiveness/success (especially the extent to which it accomplished the outcomes targeted in the logical framework)?

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[1] "Results documents" refers to mid-term and final evaluation documents.

0. Not Applicable
1. No
2. Yes, characterized as very successful/very high
3. Yes, characterized as very high
4. Yes, characterized as moderate/somewhat mixed
5. Yes, characterized as marginal/very mixed/ unsuccessful

c. Can you give an overall assessment of project effectiveness/success?

0. Not Applicable
1. No
2. Yes, very successful/very high
3. Yes, high
4. Yes, moderate/somewhat mixed
5. Yes, marginal/very mixed/unsuccessful

Projects received ratings of low, medium, or high for achievement of objectives, as follows:

Rating	Question	Category Within Question
Low	a	4 (marginal)
	b	5 (marginal)
	c	5 (marginal)
Medium	a	3 (moderate)
	b	4 (moderate)
	c	4 (moderate)
High	a	2 (very well)
	b	3 or 2 (high or very high)
	c	3 or 2 (high or very high)

5. Impact on women was measured by the responses to the following questions:

a. Do the results documents assess the project's overall impact on women?

0. Not Applicable
1. No
2. Yes, positive
3. Yes, mixed
4. Yes, negative

b. Can you make an overall assessment of the project's impact on women?

0. Not Applicable
1. No
2. Yes, positive
3. Yes, mixed
4. Yes, negative

Projects received negative, mixed, or positive ratings for impact on women as follows:

Rating	Question	Category Within Question
Negative	a	4 (negative)
	b	4 (negative)
Mixed	a	3 (mixed)
	b	3 (mixed)
Positive	a	2 (positive)
	b	2 (positive)

6. Achievement of project goals was measured by responses to the following questions:

a. Do the results documents assess overall project impact (i.e., the extent to which it accomplished its goals and purposes)?

0. Not Applicable
1. No
2. Yes, characterized as very successful/very high
3. Yes, characterized as high
4. Yes, characterized as moderate/somewhat mixed
5. Yes, characterized as marginal/very mixed/ unsuccessful

b. Can you give an overall assessment of project impact?

0. Not Applicable
1. No
2. Yes, very successful/very high
3. Yes, high
4. Yes, moderate/somewhat mixed
5. Yes, marginal/very mixed/unsuccessful

Projects received low, medium, or high ratings, as follows:

Rating	Question	Category Within Question
Low	a	5 (marginal)
	b	5 (marginal)
Medium	a	4 (moderate)
	b	4 (moderate)
High	a	2 or 3 (high or very high)
	b	2 or 3 (high or very high)

Additional information from consultants' desk reviews and field reports was used in rating projects for which the questionnaires showed insufficient information.

The analysis of relations among variables as hypothesized in the conceptual framework was performed by two- or three-way cross-tabulations. CDIE staff coded, processed, and performed computer data analysis. The final synthesis analysis incorporated suggestions and feedback from CDIE staff and all consultants participating in this study.

APPENDIX C

LIST OF PROJECTS

ID No.	Sector	Country Region	Project Title	Project Number
01	AG	TANZANIA	Arusha Regional Planning and Village Development	6210143
02	AG	ZAIRE	INERA Support	6600064
03	AG	PANAMA	Intergrated Rural Development	5250186
04	AG	BOTSWANA	Agricultural Planning	6330067
05	AG	AFRICA REGIONAL	Women in Development	6980388
06	AG	ECUADOR	Integrated Rural Development, Agriculture	5180012
07	AG	HAITI	Small Farmer Marketing	5210083
08	AG	PANAMA	Managed Fish Production	5250216
09	AG	CARIBBEAN REGIONAL	Caribbean Agricultural Extension II	5380068
10	AG	MALAWI	Agricultural Research	6120202
11	AG	AFRICA REGIONAL	Improved Rural Technology	6980407
12	AG	GHANA	Managed Input Delivery/ Agriculture Services I	6410067
13	AG	BOLIVIA	Small Farmer Organizations I	5110452
14	AG	GUYANA	Agriculture Sector Planning	5040077
15	AG	AFRICA REGIONAL	Zaire Young Farmers	6980407
16	EMP	AFRICA REGIONAL	African Enterprise II (Entente Fund)	6250717
17	EMP	El SAL-VADOR	League of Women Voters OPG	5190223

ID No.	Sector	Country Region	Project Title	Project Number
18	EMP	COLOMBIA	Small and Medium Industry	5140181
19	AG	BOLIVIA	Exploratory Research on Farming Systems	5110464
20	AG	PERU	Integrated Regional Development	5270178
21	AG	LATIN AMERICA REGIONAL	Appropriate Technology For Rural Women	5980600
22	AG	BOLIVIA	Consol. of Colonization Program (FIDES)	5110514
23	EMP	BOLIVIA	Agribusiness and Artisanry	5110472
24	EMP	GUATEMALA	Rural Enterprises Development	5200245
25	EMP	JAMAICA	Manpower Planning, Training, and Employment	5320047
26	EMP	NICARAGUA	Nutritional Improvement Program	5240108
27	EMP	ECUADOR	Tarqui Co-op and Community Development - OPG	5180008
28	EMP	UPPER VOLTA	Oncho-Freed Area Village Develop.	6860212
29	WATER	BOLIVIA	Rural Sanitation	5110458
30	WATER	BOLIVIA	Rural Potable Water (PVO)	5110495
31	WATER	HAITI	Potable Water Phase II-Care/Hacho	5210112
32	WATER	PERU	Rural Water Systems for the Sierra	5270221
33	WATER	TANZANIA	Village Environmental Improvement (PVO)	6210160
34	WATER	CAMEROON	Northern Wells (OPG) (UR) (PC)	6310025
35	WATER	CHAD	Rural Sanitary Water	6770022
36	WATER	LATIN AMERICA REGIONAL	Eval. & Utilization A.I.D. Hand Pump	9310079

ID No.	Sector	Country Region	Project Title	Project Number
37	WATER	TUNISIA	Le Kef Wells Rehabilitation	6640288
38	EMP	SENEGAL	Youth Job Development - YMCA/ Organization Rehab. Trng. (PVO)	6850222
39	WATER	DOMINICAN REPUBLIC	Health Sector II	5170120
40	WATER	TOGO	Rural Water Supplies/Environment Sanitation	6930210
41	WATER	MALAWI	Rural Water	6120207
42*	WATER	TUNISIA	Potable Water System	6640312
43*	WATER	TUNISIA	Central Tunisia Rural Development	6640312
44*	WATER	TUNISIA	Central Tunisia Rural Development	6640312
45	WATER	BOLIVIA	Rural Water Systems	5110479
46	WATER	GUATEMALA	Village Water Systems and Latrines	5200231
47	WATER	PERU	Rural Water Health Services	5270177
48	ED	MOROCCO	Social Services Training	6080157
49	ED	MOROCCO	Industrial and Comm. Job Training for Women	6080147
50	ED	EGYPT	Suez Canal University - Faculty of Medicine	2630136
51	ED	INDIA	Development and Management Training	3860487
52	ED	INDONESIA	KABN Planning and Management Trng.	4970237
53	ED	MALI	Development Leadership Training	6880221
54	ED	BOTSWANA	Agriculture College Expansion	6330074
55	ED	ZAMBIA	Training for Women Development Overseas Educational Fund (PVO)	6110202
56	ED	MALI	Training Center for Rural Women	6880225

ID No.	Sector	Country Region	Project Title	Project Number
57	ED	COSTA RICA	Overseas Education Fund - OPG	5150140
58	ED	PERU	Acomuc Campesina Training - OPG	5270204
59	ED	LIBERIA	Institute of Public Administration	6690122
60	ED	YEMEN	Basic Educational Development	2790053
61	ED	SYRIA	English Language Training	2760002
62	ED	HONDURAS	Rural Recovery Primary Schools	5220116
63	ENERGY	PHILIPPINES	Rural Energy Development	4920375
64	ENERGY	HONDURAS	Natural Resources Management (PC)	5220168
65	ENERGY	UPPER VOLTA	Forestry Education and Development	6860235
66	ED	COLOMBIA	Educational Technolgoy	5140187
67	ED	PARAGUAY	Rural Non-Formal Education	5260501
68	ENERGY	PAKISTAN	Forestry Planning and Development	3910481
69	ENERGY	THAILAND	Renewable Non-Conventional Energy	4930304
70	ENERGY	INDIA	Madhya Pradesh Social Forestry	3860475
71	ENERGY	SAHEL REGIONAL	Accelerated Impact Programs (Sahel)	6250937
72	ENERGY	LESOTHO	Renewable Energy Technology	6320206
73	ENERGY	SENEGAL	Fuelwood Production	6850219
74	ENERGY	BURUNDI	Bururi Forest	6950105
75	ED	BOTSWANA	Primary Education Improvement	6330222
76	AG	EGYPT	Small Farmer Production	2630079
77	AG	JORDAN	Sprinkler Irrigation Equipment	2780195
78	AG	CAMEROON	North Cameroon Seed Multiplication	6310001

ID No.	Sector	Country Region	Project Title	Project Number
79	AG	CAMEROON	National Planning for Community Dev.	6310017
80	AG	CAPE VERDE	Watershed Management	6550006
81	AG	TUNISIA	Livestock Feed Prod. & Utilization	6640293
82	AG	NIGER	Niamey Department Devel. Phase II	6830240
83	AG	MAURITANIA	Integrated Rural Devel. (Guidimaka)	6820201
84	AG	UPPER VOLTA	Village Livestock Development	6860203
85	AG	UPPER VOLTA	Strengthening Women's Roles in Dev.	6860211
86	AG	UPPER VOLTA	Non-Formal Education/Women in Sahel	6860226
87	AG	MALI	Operation Mils - Phase II	6880202
88	AG	MALI	Operation Haute Vallee	6880210
89	AG	NIGER	Lutheran World Relief	9320132
90	AG	NEPAL	Institute of Ag. and Animal Sciences	3670102
91	AG	SRI LANKA	Mahaweli Ganga Irrigation	3830042
92	AG	BURMA	Maize and Oilseeds Production	4820005
93	AG	THAILAND	Land Settlements	4930289
94	AG	THAILAND	NE Rainfed Agriculture Development	4930308
95	AG	THAILAND	Agricultural Planning	4930317
96	AG	THAILAND	Seed Development II	4930326
97	ED	NIGER	Literacy Training	6830237
98	EMP	THAILAND	Sericulture/Settlements	4930271
001	AG	KENYA	Arid and Semi-Arid Lands Project	6150172

ID No.	Sector	Country Region	Project Title	Project Number
002	ENERGY	NEPAL	Resource Conservation and Utilization Project	3670132
003	EMP	DOMINICAN REPUBLIC	ADEMI - Association for the Development of Microenterprises Program	5170208
004	AG	GUATEMALA	ALCOSA - Agribusiness Employment/ Investment Promotion	5960097 5960068

*Subprojects.

APPENDIX D

DESK REVIEWS AND FIELD STUDIES

Desk Reviews

Anderson, Mary B. "Women in Development: A Review of Education Sector Projects." Working Paper No. 92. November 1986.

Cloud, Kathleen. "Gender Issues in A.I.D.'s Agricultural Projects: How Efficient Are We? A Study of the Lessons Learned in Implementation of A.I.D.'s Women in Development Policy in West and North Africa, the Near East and Asia." Working Paper No. 85. April 1987.

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Lycette, Margaret, and Janet Self. "WID: A Preliminary Evaluation of A.I.D. Income Generation and Employment Projects." Working paper No. 88. November 1984.

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[1] The field studies will be consolidated and published as a companion volume to this report: "Women in Development, A.I.D.'s Experience, 1973-1985," Vol. II, "Ten Field Studies."

Blumberg, Rae Lesser. "Association for the Development of Micro-Enterprises, Inc. (ADEMI) in the Dominican Republic." May 1987.

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Kumar, Shubh. "Composition of Economic Constraints in Child Nutrition: Impact of Maternal Incomes and Employment in Low-Income Households." Ph.D. diss., Cornell University, 1977.

Robert Cassen and Associates. Does A.I.D. Work? Oxford: Clarendon Press, 1986.

Sivard, Ruth Leger. Women... A World Survey. Washington, D.C.: World Priorities, 1985.

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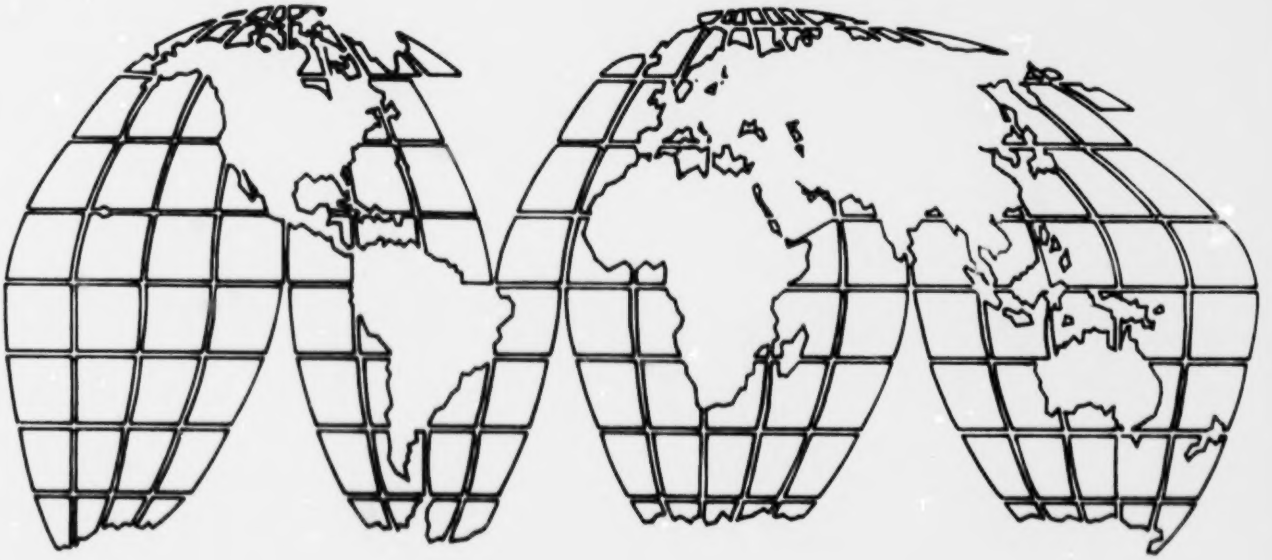
[1] Desk review and field study references are in Appendix D.



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